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D. A. Bell

1988

Catalogue #234-436  
Journal



D. A. Bell

1998

Chicago #234-430

Journal



D. A. Bell

1988

Catalogue #234-436

List of Localities







Douglas A. Bell  
1988

# Catalog

1.5 mi W Anacapa Island, Ventura Co., California

5 March

5 mi. NE of Santa Barbara Island, Santa Barbara Co., Calif.

5 March

Los Osos Landfill, 2295 Turri Ranch Road, 5.5 mi SE  
of Morro Rock, San Luis Obispo Co., Calif.

8 March

Big Creek Reserve, mouth of Big Creek, Monterey Co., Calif.

8 March, 26 April - 27 April

Monterey Bay, 1 mi. N Hopkins Marine Station, Monterey Co.,  
Calif.

13 April.

Alcatraz Island, San Francisco Bay, San Francisco Co.,  
Calif.

20 April, 13 May, 3 June

Fraser Point, Santa Cruz Island, Santa Barbara Co., Calif.

29 April

Forney Cove, Santa Cruz Island, Santa Barbara Co., Calif.

30 April - 1 May

East Anacapa Island, Ventura Co., Calif.

3 May, 17 May - 18 May

Tomales Point, 1/2 mi. N McClures Beach, Point Reyes

Natl. Seashore, Marin Co., Calif.

12 May

Prince Island, nr. San Miguel Island, Santa Barbara Co., Calif.

19 May

Spring Ranch nr. Van Damme Beach State Park, Mendocino Co., Calif.

24 May - 25 May







Douglas A. Bell  
1988

Catalog

Sugarloaf Rock at Cape Mendocino, Humboldt Co., Calif.

25 May

Pilot Rock, 1 km S of Trinidad Head, Humboldt Co., Calif.

27 May

Ano Nuevo Island, San Mateo Co., Calif.

7 June

Red Rock Island, San Francisco Bay, Marin Co., Calif.

10 June

Gregory Point Lighthouse, Cape Arago, Coos Co., Oregon

14 June - 15 June

Yaquina Head, Lincoln Co., Oregon

25 May

East Sand Island, Baker Bay near mouth Columbia River,

Clatsop Co., Oregon

21 June - 24 June

Port of Olympia, Olympia city, Thurston Co., Washington

24 June

Whitcomb Island, Grays Harbor, Grays Harbor Co., Wash.

26 June

Pine Island, Willapa Bay, Pacific Co., Wash.

27 June

Goose Island, Grays Harbor, Grays Harbor Co., Washington

28 June

Tatoosh Island, Clallam Co., Washington

30 June - 2 July

Gull Rock near Flattop Island, San Juan Is., San Juan Co.,

Washington

3 July, 5 July







Douglas A. Bell  
1988

Catalog

Colville Island, San Juan Islands, San Juan Co.,  
Washington. 8 July

Baeria Rocks, Barkley Sound, Vancouver I., British  
Columbia 13 July, 14 July

Cleland Island, near Clayoquot Sound, Vancouver I.,  
British Columbia. 15 July 1988

Yeo Rocks near Nanose Bay, Vancouver I., British Columbia  
17 July 1988

Mouth of Oyster River, Univ. British Columbia Research Farm,  
Vancouver I., British Columbia 19 July, 2 August

Port Hardy, Vancouver I., British Columbia  
19 July

Sloop Islet, Massett Inlet, Graham Island, Queen  
Charlotte Islands, British Columbia 25 July

McCreight I., Massett Inlet, Graham Island, Queen  
Charlotte Islands, British Columbia 25 July

Ross I., Massett Inlet, Graham I., Queen Charlotte Is.,  
British Columbia. 25 July

Cowley Rocks, Massett Inlet, Graham I., Queen Charlotte Is.,  
British Columbia 25 July, 26 July

<sup>Alliford</sup>  
~~Bush~~ Islets, Alliford Bay, Skidegate Inlet, Queen Charlotte  
Islands, British Columbia 27 July

Bush Islets, Alliford Bay, Skidegate Inlet, Queen Charlotte  
Islands, British Columbia 27 July 28 July

Flowery Islet, near Alliford Bay, Skidegate Inlet, Queen  
Charlotte Islands, British Columbia 29 July







Doug Bell  
1988

Catalog

DAB

*Larus occidentalis wymani*

234 Location: 1.5 mi W of Anacapa Island, Ventura Co., Calif

Date: March 5, 1988

Sex: ♂ LT: 0.72 x 0.53 x 0.47

Wt: 930 g

Fat: Mod.

Winglength: 41.2 (L)

Span: /

Po length: 10 - 29.8 (L)

7 - 27.8 cm

9 - 30.1 cm

6 - 25.6

8 - 29.3

5.24.1

out: 5.32 Mid: 5.60

Tail length: 15.5 cm Tarsus: 5.86 Toes: In: 4.26 Hal: .61

Head length: 12.33 cm

Bill L: 5.46 cm at post nares: 3.33 cm

" width: 1.33 cm at gape: 3.57 cm


" depth + Gonyx: 1.97 cm

Ant. Nares: 1.88 cm Post. Nares: 1.78

Brood Patches: 3 downy patches - no contours.

Bill color: 10YR 7/12 Spot 5R 5/12

Eyering color: 10YR 7/12 <sup>Rein</sup> Corner OR

Irides: 5Y 8/4 - diffuse pigment lower 1/2 even. 

10YR 3/1

Legs: 5R 7/3

Remarks: Stomach empty. 2 vials LHKM saved &

EtOH.







Doug Bell  
1988

Catalog

DAB

*Larus occidentalis wymani*

235

Location: 1.5 mi. W of Anacapa Island, Ventura Co., Calif.

Date: March 5, 1988

Sex: ♂ RT: 0.92 x 0.58 x 0.67 LT: 0.77 x 0.52 x 0.61

WT: 1,120 gms

Fat: Moderate

Winglength: 42.0 (L)

W. Span: /

PO Length: 10 - 28.6 cm

7 - 28.1 cm

9 - 29.8

6 - 26.3

8 - 29.2

5 - 24.4

Tail Length: 15.5 cm

Tarsus: (L) 5.50 cm

Out: 5.85 cm mid:

6.02

Toes: IN: 4.44

Hal:

0.69

Head Length: 12.95 cm

Bill length: 5.85 cm

at post. nares: 3.57 cm

" Width: 1.35 cm

at gape 3.07 cm

" Depth - Gonyx: 2.15

Ant. Nares: 2.05

Post. Nares: 1.81 cm

Brood Patches: 3. in down still, but no contours

Bill color: 10 YR 7/12

Spot 5 R 5/12

Eyeing color: 10 YR 7/12

Irides: destroyed; but ~~being~~ <sup>heavy</sup> diffuse pigment, lower 1/2.

legs: 5 R 6/4

Remarks: Stomach empty. 2 meals LHKM saved.  
+ ETOH







Doug Bell  
1988

Catalog

DAB

*Larus occidentalis wymanii*

236

Location: 1.5 mi. W Anacapa Island, Ventura Co., Calif.

Date: March 5, 1988

Sex: ♂ LT: 086K077X059 RT: 0.82 X 0.74 X 0.45

Wt: 1,180 g

Fat: Heavy

Wing Length: 41.5 (L) W. Span: ✓

Po Length: 10 - 28.4 (L) 7 - 28

9 - 29.7 cm 6 - 26.2

8 - 29.2 5 - ~~27~~ 24.0

Tail Length - 16.2 cm

Tarsus: 5.98

Toes: Out: 5.67 Mid: 3.83  
In: 5.52 Hal: 0.69

Head length: 12.58

Bill Length: 5.62

at Post Nares: 3.53

" Width: 1.25

at Gape: 2.60

" Depth - Gonyx: 2.13

Ant. Nares: 1.98

Post. Nares: 1.79

Breed Patches: 3 - feathered downy, no contours.

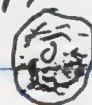
Bill Color: 10 YR 7/12

Spot 5 R 5/12

Eyering Color: 10 YR 7/10

Irides: 5 Y 8/4

Pigment 10 YR 3/1 heavy, diffuse, lower half; dispersed,  
upper half



Legs: 5 R 6/4

Remark: Stomach empty. 2 tissue vials taken LHKM.  
+ ETOH







Doug Bell  
1988

Catalog

DAB

237

*Larus occidentalis wymani*

Location: 1.5 mi. W Anacapa Island, Ventura Co., Calif.

NA.

Date: March 5, 1988

Sex ~~the~~ ♂ RT 0.77 X 0.59 X 0.48  
LT 0.88 X 0.67 X 0.63

Wt. 1,040 grams

Fat: Good.

Winglength: 42.3 (L)

Span: /

PO Length: 10-30 (L)

7-28.1

9-30.3 cm

6-26.3

8-29.6

5-24.6

Tail Length: 15.9

~~Tarsus~~

out: 6.09

mid: 6.17

Tarsus: 6.07

Toes - IN: 4.68

HAL: 0.72

Head Length: 12.71

Bill Length: 5.96

at post Nares: 3.61

" Width: 1.23

at gape: 3.28

" Depth: Gonyx - destroyed

Ant Nares: destroyed Post. Nares: ~~1.94~~ 1.94

Brood Patches:

Bill Color: 10 YR 7/12 Spot 5 R 5/12

Eyering Color: 10 YR 7/10

Index: 5 Y 8/3 Pigment 5 Y 4/2 3 diffuse

Blotches 

Legs: 5 R 7/2

Remarks: Stomach empty. 2 tissue vials taken.

+ ETOH



2000



Doug Bell  
1988

Catalog

DAB

*Larus occidentalis wymani*

238

Location: 5 mi. NNE of Santa Barbara Island

Santa Barbara Co., Calif.

Date: March 5, 1988

Sex: ♂ LT 0.72 x 0.45 x 0.42 RT 0.50 x 0.41 x 0.36

Wt: 930 G

Fat: Moderate

Wing L: 40.7 (L)

W. Span: /

PO length 10 - 28.6 (L)

7 - 27.0 cm

9 - 29.2 cm

6 - 25.2

8 - 28.8

5 - 23.2

Tail L: 15.2 cm

Tarsus: 6.17 cm (L)

Out: 5.80 Mid: 6.03 cm  
IN: 4.56 Hal: 0.57

Head L: 12.79

Bill L: 5.70

at Post. Nares: 3.46

" Width: 1.23

at Gape: 2.89 cm

" Depth: Gorge: 1.96 cm

Ant. Nares: 1.82 cm Post Nares: 1.79 cm

Brood Patches: feathered in down + contours

Bill Color: 10 YR 7/10

Spot 5R 5/12

Eyeing Color: 10 YR 7/12

Lutes: 5 YR 8/4 P.g 10 YR 3/2 - diffuse,  
graying > lower 1/2

Legs: 5R 7/3

Remarks: Stomach empty. 2 tissue nicks taken.

LHKM. + ETOH



44

11

100

11

11

11

11

11

11



Doug Bell  
1988

Catalog

172452

*Larus occidentalis wymani*

239

Location: 5 mi N~~E~~ of Santa Barbara Island

Santa Barbara Co., Calif.

Date March 5, 1988

Sex: ♂ LT: 67 x 62 x 0.50 RT <sup>0:67, 45</sup> ~~0:45~~ x ~~52~~ x 0.41

Wt. 1.120 G

Fat: Low

Wing L 43 (L)

po 10 29.5 (L) 7 28.2 cm

9 30.2 cm 6 26.5

8 29.7 5 24.5

Tail 16.7 cm

Tarsus: 6.10 (R)

Tars: <sup>OUT 5.97 cm MID 5.94</sup>  
IN 4.53 HAL 0.82

Head L: 12.71 cm

Bill L: 5.61

at P. Nares: 3.53

W 1.35

Gape 3.19

Depth Gonyx: 2.14

Ant Nares: 2.07

Post Nares: 1.83 cm

Broods: no patches

Bill Color: 10YR/7/10 spot 5R 5/12

Eyering Color: 10YR 7/10 Rear Corner

Irish: 5Y 8/6 Pig. 2.5Y 3/2 Pig. diffuse,  
grainy throat, one blotch; more lower 1/2

Legs: 5R 7/3

Remarks: few fish remains (small) in stomach.

Sequid. worms at testes. Destroyed kidneys

2 tissue vials + ETOH





Doug Bell  
1988

Catalog

172453

DAB

*Larus occidentalis wymani*

240

Location: 5 mi N~~E~~ Santa Barbara Island  
Santa Barbara Co., Calif.

Date: March 5, 1988

Sex: ♂ <sup>LT.</sup> 0.73 x 0.75 x 0.67 RT. 0.51 x 0.47 x 0.23 cm

WT. 980.0 G

Fat. Heavy

Wing L 42.4 (L)

P 10 - 29.3 (L)

7 - 28.2

9 - 30.2

6 - 26.2

8 - 29.0

5 - 24.3

Tarsus: (L) 6.20

Toes OUT - 6.31 MID - 6.33  
IN - ~~6.3~~ 4.65 HALL - 0.65

Head L - 12.85

Bill L - 5.79

at Post Nares 3.54

" W 1.25

at Cape. 3.09

" Depth Gonyx - 2.01

Ant Nares - 1.90

Post Nares - 1.78

Broods: 3 - feathered in downy coat.

Bill Color: 10 YR 7/12 Spot 5 R 7/12

Eyesring Color: 10 YR 7/12

Feeds: 5 Y 8/3 Pig 5 Y 4/2 thick, even  
latches lower 1/2, sparse upper

Left 5 R 6/3

Remarks: Stomach empty. Pin worm (1) in stomach.

2 tissues with LHKM taken + HOB





Doug Bell  
1988

Catalog

172454

DAB

241

*Larus occidentalis wymani*

Location: 5 mi NE Santa Barbara Island  
Santa Barbara Co., Calif.

Date: March 5, 1988

Sex: ♀ Ovary w/ 10 ova  $\geq 2$  mm. Rest  $< 1$  mm.

Wt. 750 G

Fat: Good

W. L: 40.1 (L)

PO 10 - 30.7 (L)

7 - 26.1 cm

9 - 27.1 cm

6 - 25.0 "

8 - 28.1 "

5 - 23.3 "

Tail - 14.5 cm

Tarsus: 5.35 cm (4)

OUT: 5.24 cm MID: 5.46  
IN: 3.98 HYL: 0.61

Head L: 11.89 cm

Bill L: 5.52 cm

at Post Nares: 3.53 cm

" W: 1.19 cm

at Gape 2.67 cm

Depth Gape 1.29 cm

Ant Nares 1.63 cm Post Nares: 1.54 cm.

Broods: feathered.

Bill Color: 10 YR 7/12

Spot SR 5/12

Eyeing: 10 YR 7/10 w/ pink corners

Iris: 5 Y 8/4 Light, diffuse pigment throughout -

5 Y 5/2 2.5 Y 3/2 diffuse, <sup>fine</sup> graining. (9)

Legs: 5 R 6/3

Remarks - ~~Few fish remains bones. Separated warms~~  
~~around testes. Destroyed kidneys~~

Stomach full crustacean shells - pink, crushed.

2 trans. w/ick - EtOH saved.





Doug Bell  
1988

# Catalog

122455

DAB  
242

*Larus occidentalis wymani*

Location 5 mi NE Santa Barbara Island  
Santa Barbara Co., Calif.

Date: March 5, 1988

Sex: ♀ Ovary has 4 ova ~ 2 mm dia. all other < 1 mm

WT. 800 G

Fat. Heavy

WL - 40 cm (R)

Span /

P. 10 - 28 (R)

7 - 26 cm

7 - 28.1 cm

6 - 24.2

8 - 27.1

5 27.7

Tail - 14.5 cm

Tarsus - 5.90 (L) cm

Tars  $\begin{matrix} \text{OUT} - 5.44 \\ \text{IN} - 3.99 \end{matrix}$  MID - 5.42 HAL - 0.67

Head L 11.48 cm

Bill L - 5.26 cm

at Post Narcs - 3.28

" W - 1.22 cm

at Gorge - 2.69

Depth Gorge - 1.79 cm

Ant Narcs 1.69

Post Narcs - 1.52

Broods - feathered.

Bill color - 10YR 7/10

Spot 5R 5/12

Eye ring color - 10YR 7/10

Iris 5Y 8/4. diffuse fine pigment lower 1/2

5Y 3/2

Legs - 5R 6/3

Rectum. Stomach has several shrimp. 2 tissue  
nials + ETOH.

35 2014/10/1

1/2000

Brian

1/2



Doug Bell  
1988

Catalog

172429

*Larus occidentalis wymani*

DAB

243

Skeleton +  
Pt. Wing

Location: Los Osos Landfill, 2295 Turri Ranch Road (5.5 mi SE  
of Morro Rock), San Luis Obispo Co., Calif.

Date: March 8, 1988

Sex: ♀ Ova > 3 mm; 6 > 1 mm &

Wt: 820 G

Fat: Moderate

Wing length: 39.8 (L)

Span: ~~110.5 cm~~ 136.5 cm

PO length 10 - 28.2 (L)

7 - 26.7

9 - 28.8

6 - 24.9

8 - 28.1

5 - 22.6

Tail length: 14.5

Tarsus: 5.60 L

ant 5.37 mid 5.48  
Toes: 24 4.07 Hal - 0.57

Head Length: 11.55

Bill L - 5.08

post Nares: 3.21

Bill Width: 1.21

at Gape: 2.48

Bill Depth: Gonyx - 1.96

ant Nares - 1.85

Post Nares - 1.70

Brood Patches - Upper Right & Left dusky. Middle ~~not~~

Bill Color - 10 YR 7/12

Spot 5 R 7/12

Eye ring Color - 10 YR 7/12 corners OR

Irises: 5 Y 8/3 Pigment 5 Y 4/2

diffuse, <sup>light</sup> grainy throat



Legs: 5 R 7/13

Remarks - Stomach w/ fish pellets.

Alular claw: LW +; RW - . 2 tissue nails + ETOH  
taken.





Doug Bell  
1988

Catalog

122430

*Larus occidentalis wymani*

DAB

244

Location: Los Osos Landfill, 2295 Turri Ranch Rd (5.5 mi. SE  
Morro Rock), San Luis Obispo Co., Calif.

Skeleton +  
pt. Wing

Date: March 8, 1988

Sex: 5000 > 2 mm ♀

Wt.: 860 Grams

Fat: Good

Winglength: 39.7 cm (L) Span: 135.9 cm

PO Length: 10 - 28.2 (L) 7 - 26.1 cm

9 - 28.5

6 - 24.8

8 - 27.9

5 - 23.0

Tail Length: 14.8 cm

Headlength:

ant. 5.33

md.: 5.51

Tarsus: 5.66 (Left)

Toes: Jr.: 4.16

Hd.: 0.54

Bill Length: 5.08 cm at post Nares: 3.14 cm

" Width: 1.22 cm at base: 2.86 cm

" Depth: Gonys - 1.96

Ant. Nares: 1.92

Post Nares: 1.77

Brood Patches: ~~Right upper down patch - other not yet~~  
~~defeathered Upper Right & Middle downy~~

Bill Color: 10YR 7/12 Spot: 5R 7/12

Eyering Color: 10YR 7/12 OR near corner

Irides: 5Y 8/3 - very little, diffuse pigment, light.

Legs: 5R 6/3

Remarks: LW: + alular claw RW - ; 2 tissue  
meals & ETOH taken. Stomach empty.

$$\begin{array}{r} 730 \\ 80 \\ \hline 810 \end{array}$$



Doug Bell  
1988

Catalog

172431

*Larus occidentalis wymani*

DAB

Location: Los Osos Landfill, 2295 Turri Ranch Road (5.5 mi SE Morro Rock), San Luis Obispo Co., Calif.

245

Shel +

Date: March 8, 1988

Left Wing

Sex: ♀ 4 ova > 2 mm

WT. 830 g

Fat: Moderate

Wing length 40.9

Span 137.5 cm

PO length 10 - 28.9 (L)

7 - 27

9 - 29.2

6 - 24.9

8 - 28.7

5 - 23.1

Tail L - 15.2

Tarsus - 5.62

OUT - 5.20 Mid - 5.40  
Toe IN - 4.09 HALL - 0.52

Head L - 11.60

Bill L - 5.06

Post Nares - 3.12

Bill W - 1.15

at Gape - 2.62

Bill D - Gorge - 1.90

Ant Nares 1.82

Post Nares - 1.63

Broad Patches - Middle patch downy; others w/ contours.

Bill color - 10 YR 7/12

Spot -

Eyeing color - 10 YR 7/12 P.g.

Irides - 5 Y 8/3 Pigment. 5 Y 4/2 - light, diffuse  
lower third. (⊙)

Legs - 5R 6/4

Remarks - Alular claw: L.W +; RW -; Stomach empty; 2 tissue meals + ETOH taken.

Brian Landry

Robe & Barnhart

Loz Opos Landfill  
2295 Turri Ranch Rd

SL0 93401

805 528-1752



Doug Bell  
1988

Catalog

*Larus occidentalis wymani*

DAB

246

Skeleton &

Wing

Location - Los Osos Landfill, 2295 Turri Ranch Rd

(5.5 mi SE Morro Rock), San Luis Obispo Co., CA Date - March 8, 1988

Sex - ♂ LT 1.10 x 0.78 x 0.75 RT. 0.85 x 0.60 x 0.61

Wt - 1,160 g

Fat - Mod

Winglength - 42.7 cm (left)

Span - 149.1 cm

PL - 10 - 30.3 cm (left)

7 - 29.3 cm

9 - 31.0 cm

6 - 27.6 cm

8 - 30.6 cm

5 - 25.1 cm

Tail Length - 16.5 cm

Tarsus 6.20 (L)

TOES OUT - 6.24 MID - 6.38  
IN - 4.97 HALL - 0.74

Head Length - 13.25

Bill L 5.81

at Post Nares 3.47

" W 1.30

at Gape 3.51

" D at Gonyx - 2.17

at Ant Nares - 2.05

at Post Nares 2.03

Brood Patches - feathered downy - middle only

Bill Color - 10YR 7/10

Spot - ~~5YR~~ 5YR 6/14

Eying Color - 10YR 7/10, Rear corner only OR.

Irides 5Y 7/3 5YR 3/2 - ~~almost no pigment~~

scattered lower half & upper half, sparse 

Legs - 5R 7/2

Remarks - Stomach empty

Alular Claw: Left Wing +; R. Wing +; 2 tissue vials &

EtOH taken.





122433

*Larus occidentalis wymani*

DAB

247

Location - Los Osos Landfill, 2295 Turri Ranch Rd., (5.5 mi SE Morro Rock), San Luis Obispo Co., Calif.

Date - March 8, 1988

SLO  
Skeleton +  
Left Wing

Sex ♂

LT: 1.02 x 0.87 x 0.84 RT: 1.07 x 0.77 x 0.62

Wt. 1,160 gms

Fat - Heavy

Winglength - 43.5 cm (left) Span - 149 cm

PO L 10 - 30.9 cm (left) 7 - 28.7

9 - 30.0

6 - ~~27.0~~ 26.5

8 - 30.8

5 - 25.0

Tail L - 16.4 cm

Tarsus - 6.21 (L)

Toes Out - 5.97 Mid - 6.24  
IN - 4.72 Hind - 0.69

Heel L - 12.97

Bill L - 5.79

at Post Nares - 3.70

Bill W - 1.38

at Beak - 3.57

" D - Gonyx - 2.19

Ant - Nares - 2.07

Post Nares - 1.88

Broad Patches - feathered in downy - all three.

Bill Color - 10 YR 7/14

Spot - 5R 5/14

Eyering Color - 10 YR 7/14

OR Rear Corner.

Irides - 5Y 8/6 Pigment. 5Y 3/2

diffuse, lower Y2

Legs - 5R 7/2

Remarks - <sup>Right</sup> Wing - alulae bump - no claw; Left wing + claw;  
Stomach empty; 2 tissue vials + ETOH taken





Doug Bell  
1988

Catalog

172421

DAB

248

Skeleton +  
Left Wing

*Larus occidentalis wymani*

Location: Big Creek Reserve (U.C. Reserve); Beach at Big Creek mouth, below "the bridge"; Monterey Co., Calif.

Date: March 8, 1988

Sex ♀ 13ova > 1.8 mm Ø.

Wt. 810 gms

Fat. Good

Winglength: 33.5 cm

Span - 134.3 cm

P<sup>o</sup> L 10 - 27.7 cm (L) 7 - ~~28.6~~ 26.6 (L)

9 - 28.6 (L) 6 - 24.5 cm (Right)

8 - 28.2 (L) 5 - 22.7 cm (L)

Tail Length - 14.5 cm

Tarsus - 5.66 cm (L) Tarsus OUT 5.52 MID 5.57 IN 4.25 HAL 0.79

Head Length - 11.70 cm

Bill Length - 5.29

at Post Nares - 3.24

Bill W - 1.20

at Gape - 2.55

Bill D - Gonyx - 1.89

Ant. Nares - 1.81

Post Nares - 1.72

Broad Patches: Upper Right - defeathered contours; Others not present yet.

Bill Color - 10 YR 7/14

Spot - 5R 5/14

Eyering Color - 10 YR 7/14

Irides - 5Y 8/4 Pigment 5Y 5/2 diffuse, ~~all~~ ~~around~~, light, > lower half. (0.2) Slightly

Legs - 5R 6/4

Remarks Stomach contains shrimp shells. 3 tissue tubes saved - HLK M + fat + ovary. Lice taken.

No alular claws.

David. Kavanaugh,  
CAS - Q. Charlotte

✓  
Q



Doug Bell  
1988

Catalog

172422

*Larus occidentalis wymani*

DAB

249

Shel. +  
Left Wing

Location: Big Creek Reserve (U.C. Reserve); beach at mouth  
of Big Creek, below "the bridge"; Monterey Co., Calif.

Date: March 8, 1988

Sex: ♀ 2 ova > 2 mm ⌀

WT: 840 G

Fat: Good.

Winglength: 39.8 cm (L)

Span: 135 cm

P 10 - 28.2 cm

7 - 26.5

9 - 28.7 cm

6 - 24.8

8 - 27.9 cm

5 - 22.7

Tail length: 14.0 cm

Tarsus - 5.61

Toe - out - 5.42  
IN - 4.05

Mid - 5.67  
HAL - 0.58

Head Length - 12.06

Bill Length - 5.02

at Post. Nares - 2.91

Bill W - 1.19

at Gape - 2.76

Bill D - Gonyx - 1.88

Ant. Nares - 1.75

Post Nares, 1.62

Brood Patches - 3 downy patches, no contours.

Bill Color - 10YR 7/14

Spot - 5R 5/14

Eye-ring Color - 10YR 7/14

Iris - 5Y 8/4

Pigment 5Y 4/2 diffuse, light;

greater in lower 1/2

⊙ - Ländig

Legs - 5R 7/3

Remarks - Stomach full of small sea urchins 1" diam.  
2 tubes LHKM + fat. Lice taken. Alular claw → RW  
only.





Catalog

DAB

*Larus occidentalis* *wymani*

~~230~~

location Monterey Bay, <sup>1 mile</sup>~~1/2 mile~~ offshore of Hopkins Marine Station, Monterey Co., Calif.

250

date April 13, 1988

sex ♂ LT: 2.28 x 1.51 x 1.12 cm RT: 1.41 x 1.06 x 0.89 cm

weight 1,250 G fat Good.

wing length  $L = 43.8 \text{ cm}$  span  $\phi$

pr. length 10 29.8 cm 7 29.4

9 30.5 W 6 27.3

8 30.0                      5 25.0

tail length 16.9 cm

tarsus R 6.62 toes in 4.73 mid 6.36 out 6.16 0.52

head length 13.77 cm

bill length 6.23 cm      post nares 3.82 cm

bill width 1.42 gape 3.44

bill depth	gonys	2.21	ant	2.20	post	2.18
			nares		nares	

brood patches Upper 2 feathered; lower downy

bill color **25** Y 7/10 spot ~~200071~~ 10 R 5/16

eyering color 10 YR 7/12.

irides 5 Y 8/4 ; Pigment: <sup>10YR</sup> 3/2 ; Very light, diffuse throat.

legs  $5R \frac{7}{3}$

remarks Shot off boat. Frozen whole, but partially thawed on trip from Monterey to Berkeley (ditto for ~~231, 232, 232~~).  
Rt. Foot → Bumblefoot. Stomach empty. 251, 252, 253

Alular Claw: Rt. W(-); L.W.: ~~4~~. 2 frozen tissue vials taken (lg).





Doug Bell  
1988

Catalog

172418

DAB

*Larus occidentalis*

~~271~~

251

location Monterey Bay, 1 mile offshore of Hopkins Marine Station,  
Monterey Co., Calif.

date April 13, 1988

Skel +  
left wing

sex ♂ LT: 1.23 x 0.72 x 0.53 cm RT: 0.89 x 0.48 x 0.55 (frozen)

weight 1,290 G

fat Good

wing length 41.7 cm

span 145.5 cm

pr. length 10 29.4 cm 7 28.0 cm

9 30.3 cm 6 26.2

8 29.7 cm 5 24.3

tail length 15.2 cm

tarsus L 6.51 toes in 4.81 mid 6.55 out 6.24 0.59

head length 12.91 cm

bill length 6.15

post nares 3.65

bill width 1.34

gape 3.47

bill depth gonys 2.19

ant nares 2.18

post nares 2.00

brood patches 3 downy

bill color 2.5 Y 7/10

spot ~~XXXXXX~~ 10 R 5/16

eyering color 10 YR 8/1

irides 5 Y 8/2 ;

Pigment 10 YR 4/2

light, diffuse blotches upper 1/3, 3 in lower 1/3

legs 5 R 7/4



remarks

shot off boat; frozen whole. Some black in  
subterminal bill tip. Stomach full w/ medium size  
fish bones. 2 frozen tissue meals taken:  
1 large, 1 small. Few segmented worms in  
intestines.





Doug Bell  
1988

Catalog

172419

DAB

*Larus occidentalis*

232

Location *Monterey Bay, 1 mile offshore of Hopkins Marine Station, Monterey Co., Calif*

252

Date *April 13, 1988*

Skeleton

Sex ♂ LT: 1.81 x 0.97 x 0.94 RT: 1.26 x 0.77 x 0.76 cm

Wing

Weight 1,100 G Fat *Slight.*

Rt.

Wing length L 41.9 cm Span 142.0 cm

Pr. length 10 29.6 cm 7 28.4 w

9 30.1 w 6 26.2 w

8 29.8 w 5 23.6

Tail length 15.8 cm

Tarsus (L) 6.37 cm Toes in: 5.09 mid: 6.35 out: 6.05 0.55

Head length 12.59 cm

Bill length 5.75 post. nares 3.43

Bill width 1.27 gape 3.15

Bill depth gonys 2.10 ant. nares 2.05 post. nares 1.86

Brood patches *Middle downy; Uppers feathered.*

Bill color 10 YR 7/12 Spot ~~5R 5/12~~ 10 R 5/16

Eyering color 10 YR 7/14

Irides 5 Y 8/6 ; Pigment 10 YR 3/2 . Thick outer

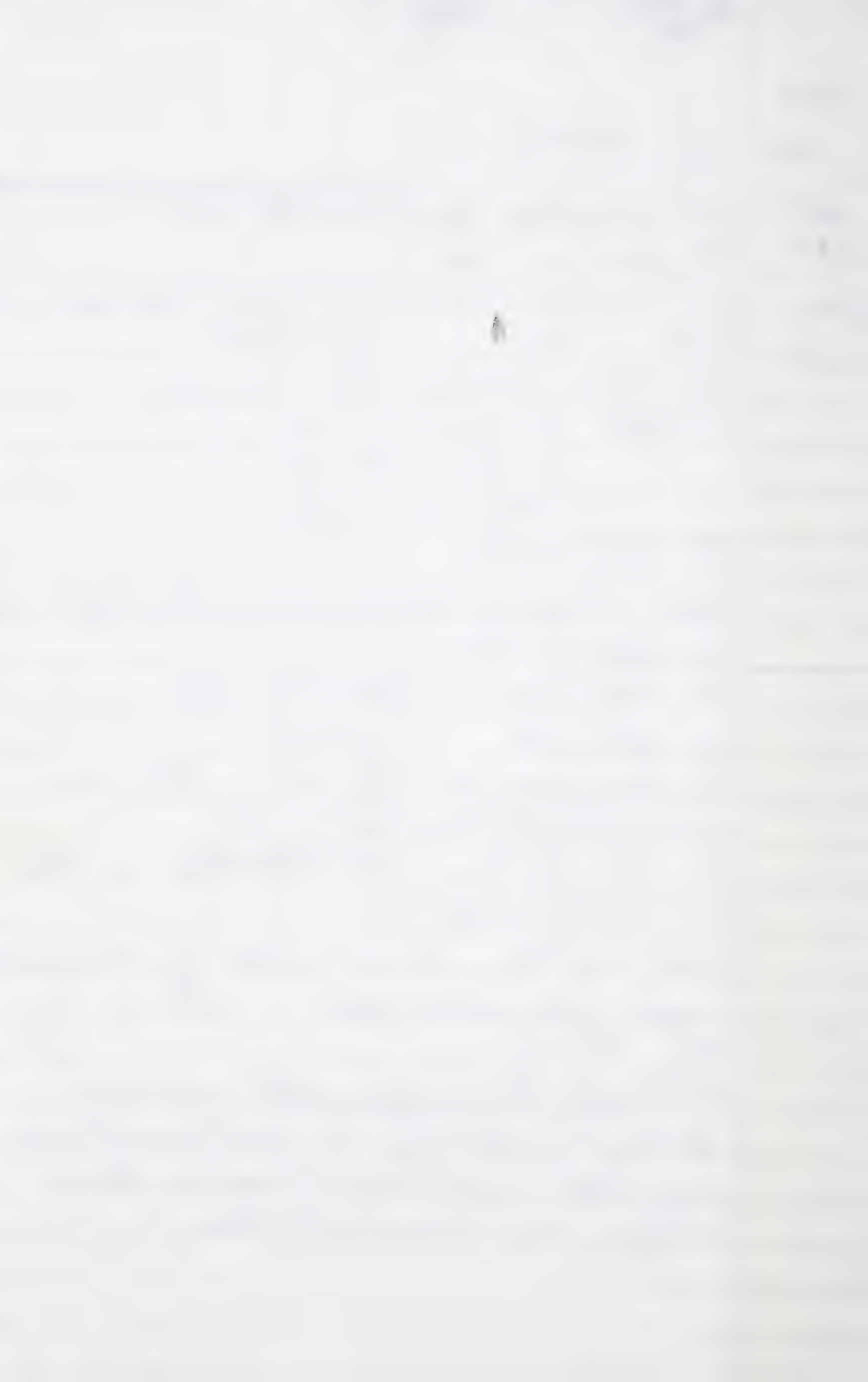
upper; thin diffuse lower



Legs 5R 7/3

Remarks *Shot off boat, frozen whole. Alular claws:*

*Rt. Wing + ; Left Wing + . Some brown tint in wing coverts. Small amount of bread in stomach. 2 large frozen tissue vials taken.*





Catalog

172420

DAB

*Larus occidentalis*

233

Location Monterey Bay 1 mile offshore Hopkins Marine Station, Monterey Co., Calif.

253

Date April 13, 1988

Sex ♂ LT: <sup>1.30</sup> ~~1.30~~ X 0.81 X 0.77 RT: 1.14 X 0.76 X 0.77 cm

Weight ~~1.015 G~~ 1.015 G Fat Moderate

Winglength L 41.5 cm Span 143 cm

Pr. length 10 28.6 cm 7 27.9 W

9 29.6 6 26.2 W

8 29.3 5 23.9 cm

Taillength 15.6 cm

Tarsus (L) 6.39 cm Toes: in: 4.60 mid: 6.25 out: 6.20 0.40

Headlength 12.73 cm

Bill length 5.79 post. nares: 3.61 cm

Bill width 1.33 gape: 3.17

Bill depth Gonys: 2.04 ant. nares: 1.97 post. nares: 1.92

Brood patches 3 downy

Bill color 10 YR 7/12 Spot ~~5 R 5/12~~ 10 R 5/16

Eyering color 10 YR 7/12; Pigment 10 YR 3/3, heavy diffuse lower 1/2.

Irides 5 Y 8/3

Legs 5 R 7/4

Remarks Shot off boat, frozen whole. Small P=10  
mevilous. Alular claw: LW +; RW +;  
2 large tissue meals frozen. Stomach empty.





Catalog

DAB

*Larus occidentalis occidentalis*

234

Location Alcatraz I., SF. Co., Calif.

✓ 254

Date April 20, 1988

Skel. +  
Rt. Wing.

Sex ♂ LT: 1.85 X 1.41 X 1.09 RT: 1.59 X 1.18 X 1.04 cm

Weight 1,200 G Fat Good

Wing length L 43.5 cm Span 145 cm

Pr. length 10 30.3 cm 7 broken

9 31.1 6 broken

8 29.3 5 broken

Tail length 15.60 cm

Tarsus (L) 6.81 Toes in: 4.91 mid: 6.43 out: ~~6.25~~ 0.57  
6.25

Head length 14.95 cm

Bill length 6.00 post. nares: 3.61 cm

Bill width 1.28 gape: 3.38

Bill depth Gonys: 2.25 ant. nares: 2.17 post. nares: 1.94 cm

Brood patches - ~~not really~~ 3 downy.

Bill color 10 YR 7/10 Spot 2.5 YR 6/16.0

Eyering color 10 YR 7/10

Irides 7.5 Y 7/4 ; Pigment: 10 YR 2/2 Band-like, diffuse,  
lower 1/3

Legs 2.5R 5/6

Remarks Caught by hand - frozen whole after couple hours.

Blood taken. Alular claws: RW + LW + (both).

Stomach full w/ fish meal + vertebrae. 2 large tissue  
meals frozen.





D. A. Bell  
1988

Catalog

192423

DAB

*Larus occidentalis wymani*

235

Location Mouth of Big Creek, <sup>Big Creek Reserve</sup> Reserve, Monterey Co., Calif.

255

Date April 26, 1988

Sex ♂ ♀ 11 ova > 3 mm.

Skeleton +  
Rt. Wing

Weight 800 G

Fat none

Wing length 38.4 cm (left) Span 137.8 cm

Pr. length 10 28.0 cm (w) 7 25.9 cm

9 28.1 6 24.6 cm

8 27.2 5 22.8 cm

Tail length 14.5 cm

Tarsus (L) 5.59 (L) Toes: in: 4.26 mid: 5.68 out: 5.48 Hal 0.48

Head length 11.93 cm

Bill length 5.19

post. nares: 3.24 cm

Bill width 1.20

gape: 2.89 cm

Bill depth Gonys: 1.95

ant.

post.

nares: 1.90

nares: 1.73 cm

Brood patches All feathered.

Bill color ~~WAPER M. 2.5 Y 7/12~~ 10 YR 7/12 Spot SR 5/12

Eyering color 10 YR 7/12 + corners

Irides 5 Y 8/3. Pigment 10 YR 2/1 LEFT: Heavy, blotchy lower 1/2  
RIGHT: Scattered blotches throughout.

Legs 5 RP 6/6

Remarks Trapped on beach. Stomach full of barnacles

2 tissue vials + 1 blood vial taken

Alulans: LW - RW: +





Doug Bell  
1988

Catalog

DAB

*Larus occidentalis wymani*

236

Location Big Creek Reserve, Monterey Co., Calif.

256

Date April 26, 1988

Skeleton +

Sex ♀ 5ova > 5mm

Weight 1000 G

Fat Heavy

Left Wing

Wing length L 40.2 cm

Span 138.5 cm

Pr. length 10 27.0 cm 7 27.8

9 29.0 cm 6 25.1

8 28.5 5 24.3

Tail length 15.0 cm

Tarsus (L) 5.94 Toes: in: 4.04 mid: 6.07 out: 5.77

0.41

Head length 11.62

Bill length 5.30

post. nares: 3.07

Bill width 1.12

gape: 2.68

Bill depth Gonys: 1.85

ant. nares: 1.81 post. nares: 1.72

Brood patches 2 downy uppers; middle feathered

Bill color 10YR 7/12

Spot 5R 5/12

Eyering color <sup>LM:</sup> 10YR 7/12 + corners

Irides 5Y 8/3 Pigment 2.5Y 3/2. Light, sandy lower 1/2

legs 5R 5/4

Remarks Stomach full bread. Shot on beach. 2 tissue  
meals taken. Stulans: RW + LW +

LM: 2.5Y 7/10

~~LM: 2.5Y 7/10~~  
LM: 2.5Y 7/10





Doug Bell  
1988

Catalog

DAB

*Larus occidentalis wymani*

237

Location Big Creek Reserve, Monterey Co., Calif.

257

Date April 26, 1988

Skeleton  
+ Left  
Wing

Sex ♂ Testes ca. 1 cm long x 0.70 cm

Weight 1,130 G fat Medium

Wing length R 41.4 cm span 142.5 cm

Pr. length 10 28.8 7 27.1

9 29.3 6 25.1

8 28.8 5 23.6

Tail length 15.5 cm

Tarsus (L) 6.32 Toes in: 4.18 mid: 5.98 out: 5.83 cm

Head length 12.81

0.42

Bill length 5.40 post. nares: 3.56

Bill width 1.25 gape: 3.19

Bill depth gonys 2.10 ant. 2.04 post. 1.89  
nares: nares:

Brood patches Middle + Up. Rt. downy; Upper left feathered.  
UM: 2.54 7/12

Bill color 10YR 7/12 Spot 5R 5/12

Eyering color 10YR 7/14 + corners

Irides 5Y 8/4 Pig: 10YR 2/2 L: small crescent, middle lower 1/3  
R: 3 diffuse blotches

Legs 5R 5/3

Remarks Empty stomach. Shot on beach. 2 tissue vials  
taken. Alulars: LW +; RW +





Doug Bell  
1988

Catalog

172426  
DAB

*Larus occidentalis wymani*

238

Location Big Creek Reserve, Monterey Co., Calif.

258

Date April 26, 1988

Skeleton +

Sex ♀ 8 ova > 5 mm

Left Wing

Weight 950 G

Fat Heavy

Wing length 39.9 cm R Span 137.5

Pr. length 10 28.5 7 26.8

9 29.0 6 24.6

8 28.6 5 22.8

Tail length 15.2 cm

Tarsus (L) 5.90 Toes in: 4.80 mid: 5.50 out: 5.16 0.48

Head length 11.42

Bill length 5.02 post. nares: 3.17

Bill width 1.15 gape: 2.84

Bill depth gonys 1.91 ant nares: 1.79 post. nares: 1.63

Brood patches 3 downy

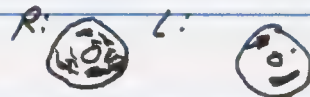
um: 5YR 6/10

LM: 5YR 6/12

Bill color ~~10YR 7/14~~ Spot 5R 5/14

Eyering color ~~10YR 7/14~~ 5YR 6/10 + Corners + tubercles

Irides 2.5 Y 8/6. P.g. 10YR 2/2 - Big blotches lower + upper,



Legs 2.5 R 6/4

Remarks Empty stomach. Shot on beach.

2 tissue vials taken. alulans: LW - RW +





# Catalog

DAB

*Larus occidentalis wymani*

239

Location Big Creek Reserve, Monterey Co., Calif.

259

Date April 26, 1988

Skeleton

Sex ♀ 10 mm > 3 mm

Left Wing

Weight 1,030 G

Fat Heavy

Wing length ~~40.38~~ <sup>R</sup> 40.1 cm

Span 138.0 cm

Pr. length 10 29.6

7 27.6

9 30.0

6 26.0

8 29.2

5 24.0

Tail length 15.7 cm

Tarsus (L) 6.12 Toes in: 4.19 mid: 5.86 out: 5.69 0.57

Head length 11.89

Bill length 5.54

post. nares: 3.15

Bill width 1.23

gape: 2.98

Bill depth gonys: 1.91

ant. nares: 1.82

post. nares: 1.72

Brood patches

2 UPPERS: downy

Middle - Feathered.

UM: 5YR 6/10  
LM: 5YR 6/12

Bill color 5YR 8/12

Spot 5R 5/14

Eyering color 5YR 6/12 + corns + tubercles

Irides 5Y 8/4 No pigment. Right eye; trace left eye

Legs 10 YR 7/6

Remarks Shot on beach. 2 tissue meals taken

Stomach empty. Alula: RW + LW





# Catalog

172428

DAB

*Larus occidentalis wymani*

~~240~~

Location Big Creek Reserve, Monterey Co., Calif.

260

Date April 27, 1988

Skeleton +

Sex ♂ LT 1.78 x 1.24 x 1.16

Rt. Wing

Weight 1150 G

Fat Moderate

Wing length 42.2 cm (R)

Span 148 cm

Pr. length 10 30 cm

7 28.2 cm

9 30.3

6 26.2

8 29.7

w 5 24.3

Tail length 16.0 cm

Tarsus (R) 6.87

Toes in: 4.83 mid: 6.22 out: 6.08 HA: 0.69

Head length 12.73 cm

Bill length 5.66 cm

post. nares: 3.62 cm

Bill width 1.31 cm

gape 3.32 cm

Bill depth gonys: 2.17

ant. nares: 2.06

post. nares: 1.91 cm

Brood patches Upper downy, lower feathered.

Bill color

u/m. 2.5 Y 7/12

10 YR 7/10

Spot 5R 5/12

Eyering color 10 YR 7/10

Irides 2.5 Y 8/4 ; Pig: 2.5 Y 3/2 - Very diffuse, light patches

Lower 1/2, Upper 1/3.



Legs 5RP 6/4

Remarks: Shot. Stomach 1/2 full w/ fish meal. Shot on

beach, 2 tissue vials taken. 1 blood, 1 ETOH

tissue vial. Alulars: LW: + RW: +

MRJ

Monterey 15-16

San Miguel 17-18

Santa Barbara 19-25



Doug Bell  
1988

Catalog

172490

DAB

*Larus occidentalis wymani*

261

Location. Fraser Point, Santa Cruz Island, Santa Barbara Co.,

Date April 29, 1988 Calif.

Sex ♀ 7 ova > 4 mm; 7 ova > 2 mm

Weight 880 G Fat Good

Wing length (R) 39.5 cm Span 135.5 cm

Pr. length 10 28.5 cm 7 26 W

9 28.7 6 24 W

8 28.0 W 5 22.4 cm

Tail length 14.9 cm

Tarsus (L) 5.16 Toes in: 3.67 mid: 4.87 out: 4.38 Ha. 0.51

Head length 11.19

Bill length 4.90 post. nares: 3.24

Bill width 1.34 gape 2.78

Bill depth Gonys: 1.95 ant. 1.84 post. 1.64  
nares: nares:

Brood patches

Bill color 10YR 7/14 Spot 6.25 R 5/14.0

Eyering color 10YR 7/14 + corners

Irides 5Y 8/4 Pig. 10YR 3/2 - Faint, nearly none lower 1/3.

Legs 5R 8/4

Remarks shot. Stomach full w/18 cm anchovy.

Sagitt. worms in mesenteries. LHKM tissue  
vials saved (2).





## Catalog

DAB

*Larus occidentalis wyman.*

262

Location Fraser Point, Santa Cruz Island, Santa Barbara Co.,

Date April 29, 1988 abf.

Sex ♂ 1.55 x 0.91 x 0.87 RT: 1.07 x 0.85 x 0.82 cm

Weight 970 G

Fat Good

Wing length (L)

Span 146 cm

Pr. length 10 29.4

7 27.7

9 30.1 w

6 25.3 w

8 29.1 w

5 23.6

Tail length 15.2 cm

Tarsus (L) 6.02

Toes in: 4.43 mid: 5.96 out: 5.69  
had 0.61

Head length 12.40

Bill length 5.85

post. nares 3.35

Bill width 1.25

gape 3.42

Bill depth gonys 206

ant. 2.02

post. 1.91

Brood patches

nares:

nares:

Bill color 2.5Y 7/12

Spot 8.75R 4.5/16.5

Eyering color 2.5Y 7/12

Irides 5Y 7/4 No Pigment.

Legs 10RP 6/6

Remarks Shot. Heavy segmented worm infestation - in  
mesenteries. 2 mals of LHKM taken





# Catalog

172452

DAB

*Larus occidentalis wymani*

263

Location Forney Cove, Santa Cruz Island, Santa Barbara Co., Calif.

Date April 30, 1988

Sex ♀ 8 ova > 0.50 cm; 10 ova > 3 mm.

Weight 840 G Fat Good.

Wing length R 39.7 cm Span 137 cm

Pr. length 10 27.6 cm 7 26.2 cm

9 28.1

6 24.4

8 27.6

5 22.9

Tail length 14.3 cm

Tarsus (L) 6.02 Toes: in: 4.28 mid: 5.8/out 5.83 0.60

Head length 11.80

Bill length 5.21 post. nares: 3.16

Bill width 1.25 gape 2.39

Bill depth Gonys: 1.97 ant. 1.82 post. 1.7/  
nares: nares:

Brood patches 3 - Middle dime size, Upper 2 downy.

Bill color 10YR 7/12 Spot 5R 5/10

Eyering color ~~7.5YR~~ 7.5YR 7/10

Irides 5Y 8/2; Pigmt. 10YR 3/2 diffuse, wide, lower 1/2

Legs 10 RP 5/4

Remarks Shot. 2 Blood vials; 1 lg + 1 small tissue vial. 2 eye

photos #6, 7. <sup>no.</sup> ~~Stomach~~ <sup>no.</sup> ~~min.~~ Stomach empty.





# Catalog

DAB

*Larus occidentalis wymani*

264

Location Forney Cove, Santa Cruz Island, Santa Barbara Co., Calif.

Shel. +

Date April 30, 1988

Left wing

Sex ♀ 8 ova > 4mm

Weight 890 G

Fat Good

Wing length R 38.2 cm W Span 130 cm

Pr. length 10 27.2 cm W 7 26.1 cm

9 27.7 W 6 24.5

8 27.3 5 22.7

Tail length 14.0 cm

Tarsus (L) 5.54 Toes in: 3.90 mid: 5.20 out: 5.32 0.58

Head length 11.71

Bill length 5.45

post. nares: 3.31

Bill width 1.17


gape: 2.83

Bill depth Gonys 1.98 ant. 1.86 post. nares: 1.77

Brood patches 2 upper downy; Middle feathered

Bill color 10YR 7/12 Spot 8.75R 4.5/6.5

Eyering color 10YR 7/12

Irides 5Y 8/2 Pigmt. 5Y 3/2 Light, diffuse lower half.  Thin pigment.

Legs 5R 6/4

Remarks Shot. 1 eye photo #8; 1 lg + 1 small tissue nail frozen; 1 E+OH nail taken. Stomach 1/2 full w/ near 1/3 of 6" fish - anchovy (very blueish sides). Alulae claw right wing.





# Catalog

DAB

*Larus occidentalis wymani*

265

location Forney Cove, Santa Cruz Island, Santa Barbara Co., Calif.

date April 30, 1988

sex ♂ LT 1.89 x 1.29 x 1.02 RT: 1.60 x 1.14 x 1.12 cm

weight 1,130 G fat Heavy

wing length R 42.0 cm span 141 cm

pr length 10 29.1 cm w 7 27.6

9 29.9 w 6 26.4

8 29.6 5 24.0

tail length 15.5 cm

tarsus L 6.20 toes in 4.43 mid 5.87 out 5.64 0.56

head length 12.77

bill length 5.87 post nares 3.50

bill width 1.39 gape 3.21

bill depth gonys 2.16 ant nares 2.04 post nares 1.87

brood patches 3 downy

bill color 10 YR 7/12 spot 5R 5/12

eyering color 7.5 YR 7/12

irides 5Y 8/2 Pigment: 5Y 2.5/2 Heavy lower half.

legs 7.5R 7/4; but major color is 5YR 7/4

remarks Shot. 2 lg + 1 sm. frozen tissue vials.

1 EtOH vial (+ testes). Segmtd. worms (mild infestation) in mesenteries of intestine. Stomach w/ remains of small fish - bones. No alular claw left wing

Shel +  
St. Wing





## Catalog

172445

DAB

*Larus occidentalis wymani*

266

location Forney Cove, Santa Cruz Island, Santa Barbara Co., Calif.

date April 30, 1988

Skel. +  
Pl. Wing

sex ♂ LT 1.42 x 0.77 x 0.76 RT: 1.27 x 0.91 x 0.82

weight 950 g fat Good

wing length L 42.4 cm span 141 cm

pr length 10 29.3 cm 7 28.4 cm w

9 30.2 6 26.3 w

8 29.6 5 23.7 w

tail length 15.5 cm 2 black feathers

tarsus L 5.89 toes in 4.55 mid 6.14 out 6.10 0.57

head length 12.70

bill length 5.83 post nares 3.56

bill width 1.27 gape 3.01

bill depth gonys 2.08 ant nares 2.05 post nares 1.92

brood patches 3 downy

bill color 10 YR 7/10 spot 8.75 R 4.5/16.5

eyering color 10 YR 7/10

irides 5Y 8/2 Pigmt: 10 YR 3/2 Peppered throat.

legs 5R 6/4

remarks shot. Small windows - primary 10 only. 1 lg + 1 sm

frozen tissue anal. Segmt. Worms around kidneys  
/mild infestation. Alular claw left wing.





## Catalog

172446

DAB

*Larus occidentalis wymani*

267

Shot.

location Forney Cove, Santa Cruz Island, Santa Barbara Co., Calif.

date April 30, 1988

sex ♂ LT: 1.87 x 1.52 x 1.45 RT: 1.30 x 1.10 x 1.05

weight 1050 G fat Heavy

wing length 42.4 cm (L) span 149.7 cm

pr length 10 30.4 7 29.6

9 31.6 6 27.8

8 31.0 5 25.7

tail length 16.2 cm

tarsus L 6.71 toes in 4.47 mid 6.40 out 6.07 OS6

head length 12.74

bill length 6.01 post nares 3.49

bill width 1.34 gape 3.31

bill depth gonys 2.25 ant nares 2.12 post nares 1.96

brood patches 3 downy

bill color 10 YR 7/12 spot 8.75R 4.5/16.5

eyering color 10 YR 7/14

irides 5 Y 8/4 pigment 10 YR 3/2 - Thick, grainy lower half.

legs 2.5 Y 8/8 Feet 5 YR 7/6

remarks Shot. 2 blood vials. 3 eye photos - 9-11. When the bird came down it threw up a 10" midshipman fish. Fish bones in stomach. 2 lg. frozen tissue vials. Testes in ETOH. Alular claw right missing.





# Catalog

172492

DAB

*Larus occidentalis wymani*

268

location Forney Cove, Santa Cruz Island, Santa Barbara Co., Calif.

date April 30, 1988

Skeleton +

Lft Wing

sex ♂ LT: 1.76 X 1.45 X 1.27 RT: 1.38 X 1.09 X 1.08 cm

weight 1000 G fat Heavy

wing length(L) 42.1 cm w span 142.5 cm

pr length 10 29.5 cm w 7 27.6

9 30.0 6 26.0

8 29.2 5 24.0

tail length 15.7 cm

tarsus L ~~6.71~~ 5.99 toes in ~~4.33~~ 4.33 mid ~~5.85~~ 5.85 out ~~5.76~~ 5.76 0.55 0.56

head length 124.70

bill length ~~6.4~~ 5.83 post nares 3.47

bill width 1.33 gape ~~3.31~~ 3.42

bill depth ~~2.05~~ 2.13 ant nares 2.03 post nares ~~1.96~~ 1.92

bill color 7.5 YR 7/12 spot 5R 5/12

brood patches 3 downy

eyering color 7.5 YR 7/12 + corners

irides 5Y 8/4 Pigment. 10 YR 3/3. Heavy, blotchy lower 1/2.

legs 2.5Y 8/8 Feet 7.5 YR 6/6

remarks Shot. 1 blood meal. 2 lg. frog meals. Stomach with just a few small fish vertebrae + meal.





Forney Cove, Santa Cruz Island, Santa Barbara Co., Calif

April 30, 1988

DAB 269 ♂ *Eremophila alpestris* Ad. Skull. Wt. 29.5 gms  
Left Testis:  $8.1 \times 5.8 \times 5.4$  mm Right testis:  $7.1 \times 5.7 \times 5.5$  mm.  
Singing. No fat. Tissues (LHKM) taken, frozen

May 1, 1988

DAB 273 ♂ *Eremophila alpestris* Ad. Skull Wt. 30.0 gms  
Left Testis:  $8.5 \times 5.6 \times 5.6$  mm Right testis:  $7.9 \times 6.0 \times 5.4$  mm  
Chasing another male. Slight fat. Tissues taken (LHKM),  
frozen. Eyes + some tissue also preserved in ethanol.

DAB 274 ♂ *Eremophila alpestris* Ad. Skull Wt. 30.5 gms.  
Skull nearly destroyed. Both testes large, but torn.  
Singing. No fat. Several intestinal worms - saved  
in ethanol. Tissue taken (LHKM), frozen.





Doug Bell

Catalog

112448

DAB

*Larus occidentalis wymani*

270

location Forney Cove, Santa Cruz Island, Santa Barbara Co.,

date May 1, 1988

Calif.

Shel. +  
Pt. Wing

sex ♀ 9 ova &gt; 2 mm

weight 800 G

fat Moderate

wing length R 39.5 cm

span 135.5 cm

pr length 10 28.3 cm 7 26.3 cm W

9 28.5 W 6 24.5

8 27.6 W 5 23.1

tail length 14.8 cm

tarsus 5.53 (R) toes in 4.33 mid 5.71 out 5.56 0.56

head length 11.51

bill length 5.15

post nares 3.27

bill width 1.19

gape 2.84

bill depth 1.82

ant. nares 1.73 post nares 1.65

brood patches 3 downy + pin feathers

bill color 2.5 Y 7/10

spot 8.75 R 4.5/16.5

eyering color 10 YR 7/12 <sup>+ corners</sup> Pigmt. 5 Y 4/2. Diffuse, sandy lower 1/2, scattered upper 1/3.

irides 5 Y 8/2



legs 5 RP 6/8

remarks shot, 1 eye photo #14. Small PO windows on #10.

2 lg. frozen tissue vials taken.





# Catalog

172491

DAB

*Larus occidentalis wymani*

271 location *Forney Cove, Santa Cruz Island, Santa Barbara Co.,*

date *May 1, 1988 Calif.*

sex ♀ 7 ova > 3 mm

weight 845 G

fat Heavy

wing length(R) 39.6 cm

span 133.5 cm

pr length 10 27.7 cm

7 25.7 cm

9 28.0

6 24.3

8 27.3 w

5 22.5 cm

tail length 14.3 cm

tarsus 5.76 R toes in 4.38 mid 5.76 out 5.40 0.60

head length 11.62

bill length 5.02

post nares 3.06

bill width 1.09

gape 2.45

bill depth gonys 1.78

ant nares 1.70

post nares 1.57

brood patches 3 downy

bill color 2.5 Y 7/12

Spot: 8.75 R 4.5/16.5

eyering color 10 Y R 7/12 + corners R

irides 5 Y 8/3 Pigmt: 10 Y R 3/3. Very little, grainy lower 4/3

legs 5 R P 6/6

remarks Shot. 2 eye photos. Stomach empty except for broken squid beaks. 2 lg. tissue meals frozen. 1 large segmt'd. worm saved in EtOH





# Catalog

172450

DAB

*Larus occidentalis wymani*

272  
Skel +  
left wing

location Forney Cove, Santa Cruz Island, Santa Barbara

date May 1, 1988 Co., Calif.

sex ♂ LT: 1.64 x 1.29 x 1.10 RT: 1.14 x 0.89 x 0.83 cm

weight 970 G

fat Heavy

wing length 41.5 cm R

span 143 cm

pr length 10 29.8 cm

7 28.3 cm

9 30.5

6 26.5

8 29.9

5 24.4

tail length 15.8 cm

tarsus 5.64 R toes 4.22 in 5.72 mid 5.50 out 0.58

head length 12.51

bill length 5.49

post nares 3.42

bill width 1.24

gape 3.12

bill depth gonys 2.14

ant nares 2.08

post nares 1.80

brood patches 2 downy; middle quarter-size

bill color 2.5Y 7/10

spot 8.75R 4.5/16.5

eyering color 10YR 7/10 + rear corners

irides 5Y 8/3. Pigment: 10YR 3/2. Thick grainy, irreg. in lower 1/2.



legs 5RP 6/6

remarks shot. Stomach w/ few fish bones (rbs).

2 lg tissue vials frozen. 1 ETOH vial saved.





172414

DAB

*Larus occidentalis wymani*

275

location <sup>East</sup> Anacapa Island, Ventura Co., Calif.

date 3 May 1988

Enlarged oviduct

sex F Iova 9mm; 327mm; 522mm

weight 840 G

fat Heavy

wing length 39.7 cm (R) span 137 cm

pr length 10 27.9 cm 7 25.3

9 28.4

6 23.5 w

8 27.3

5 22.1

tail length 14.3 cm

tarsus 5.61

toes in 4.27 mid 5.78 out 5.48 0.40

head length 11.36

bill length 5.26

post nares 3.30

bill width 1.12

gape 2.88

bill depth gonys 1.91

ant nares 1.81 post nares 1.64 cm

brood patches 3

bill color 2.5Y 7/12

spot Scarlet

eyering color 10YR 7/12

irides 5Y 8/4 Pigment 5Y 4/3 Diffuse, blotchy blotchy

lower 1/2.

legs 5RP 6/2

remarks trapped off 3-egg nest stomach empty

Alular: Left: (+) Right: (+). 2 tissue meals frozen  
4 hrs after death & 1.5 hrs after removal.

Eggs: 275-A: 6.56 x 4.88 cm 80 gms 276-B: 6.63 x 4.71 cm

77.0 gm; 275-C: 6.71 cm x 4.49 cm 74.0 gms

Egg: MVZ 13611





DAB

*Larus occidentalis* ~~wymani~~

275

location <sup>East</sup> Anacapa Island, Ventura Co., Calif.

date 3 May 1988

Enlarged oviduct

sex F Iova 9mm; 3&gt;7mm; 5&gt;2mm

weight 840 G

fat Heavy

wing length 39.7 cm (R) span 137 cm

pr length 10 27.9 cm 7 25.3

9 28.4

6 23.5 w

8 27.3

5 22.1

tail length 14.3 cm

tarsus 5.61

toes in 4.27 mid 5.78 out 5.48 0.40

head length 11.36

bill length 5.26

post nares 3.30

bill width 1.12

gape 2.88

bill depth gonys 1.91

ant nares 1.81 post nares 1.64 cm

brood patches 3

bill color 2.5Y 7/12

spot Scarlet

eyering color 10YR 7/12

irides 5Y 8/4 Pigment 5Y 4/3. Diffuse, blotchy blotchy lower 1/2.

legs 5RP 6/2

remarks trapped off 3-egg nest stomach empty

Alular: Left: (+) Right: (+). 2 tissue meals frozen 4 hrs after death &amp; 1.5 hrs after removal.

Eggs: 275-A: 6.56 x 4.88 cm 80 gms 276-B: 6.63 x 4.71 cm

77.0 gm; 275-C: 6.71 cm x 4.49 cm 74.0 gms

Egg: MVZ 13611





172465

DAB

*Larus occidentalis wymani*

276

location <sup>East</sup> Anacapa Island, Ventura Co., Calif.

date 3 May 1988

sex ♀ 3 ova &gt; 7 mm; 5 ova &gt; 3 mm; Enlarged oviduct.

weight 860 G

fat Heavy

wing length L 38.0 cm

span <sup>131.5</sup> ~~129.5~~ cm

pr length 10 27.5 cm

7 25.7 cm

9 28.2 cm

6 23.8

8 27.5 cm

5 22.2

tail length 14.8 cm

tarsus (L) 5.79 cm

toes in 3.94 mid 5.34 out 5.30 0.55

head length 11.01 cm

bill length 5.04 cm

post nares 3.03 cm

bill width 1.05 cm

gape 2.72 cm

bill depth gonys 1.76

ant 1.71

post nares 1.58 cm

brood patches 3

bill color 2.5Y 7/12

spot 5R 5/12

eyering color 10YR 7/12 + corners

irides 2.5Y 8/4 Pigment. 10YR 3/3 - Heavy blotches lower  $\frac{1}{2}$ .

legs SRP 6/4

remarks trapped off 3-egg nest. Stomach full of aluminum wrappers & a 2" x  $\frac{1}{2}$ " piece of clear glass. Left wing: Alular <sup>claw</sup> ~~lump~~; Right Wing: Alular lump. 2 frozen tissue vials taken from bird; not frozen until ca. 4 hrs after death, and 1.5 hours after removal from bird.

Eggs: [276 A] 6.98 x 4.76 cm, 81.0 Gms; [276 B] 7.10 cm x 4.68 cm

82.0 gms [276-C]: ~~7.70 x 4.68 cm~~ 81.0 gms  
6.74 x 4.77 cm





192486

DAB

277

Shel. +  
Left Wing*Larus occidentalis wymani*

Location East Anacapa Island, Ventura Co., Calif.

date 3 May 1988

sex ♀ Fova &gt; 5 mm Enlg. oviduct

weight 820 G

fat Heavy

winglength R 39.0 cm span 135 cm

pr length 10 27.5 cm 7 26.4 cm

9 28.3 w 6 24.6

8 27.5 cm 5 23.5 cm

tail length 14.6 cm

tarsus L 5.36 cm toes in 4.00 mid 5.47 out 5.23 cm

0.58

head length 11.46 cm

bill length 5.29 cm

post nares 3.28 cm

bill width 1.12

gape 2.57

bill depth gonys 1.86

ant

nares

1.82

post

nares

1.66 cm

brood patches 3

bill color 2.5 Y 7/12

spot Scarlet

eyering color 2.5 Y 7/10

irides 5 Y 8/6 Pigment 10 YR 3/2 Heavy blotches lower 1/3

legs 5 RP 5/6

remarks Trapped off 3-egg nest. Threw up fish mush.  
2 tissue vials frozen - 4 hrs after death + 1.5 hrs after  
removal from bird.

Alular Claw: Left: - ; Right: +.

Eggs: 277 A: 6.82 X 4.82 cm 80.0 gms Embryo 0.83 cm

277 B: 6.66 X 4.80 cm 78.0 gms

277 C: 6.69 X 4.60 cm 74.0 gms





192337

Doug Bell  
1988

Catalog

DAB

*Larus occidentalis* *melanes*

278

location 1/2 mi N ~~Melanes~~ Beach, Tomales Point, Point Reyes  
National Seashore, Marin Co., Calif.

278

date May 12, 1988

sex ♀ 4 ova &gt; 3 mm

skeleton +

weight 1000 G

fat Heavy

Rt. Wing

wing length 37.1 cm (L) span 132 cm

4th

pr length 10 26.2 7 24.8

YR.

9 26.5 6 23.3

8 26.0 5 21.2

tail length &amp; No tail

tarsus 6.13 cm (L) toes in 4.47 mid 6.12 out 5.75 0.51

head length 12.13

bill length 5.85

post nares 3.45

bill width 1.27

gape 3.21

bill depth 1.97

ant 1.95

post nares 1.82

bill color um: 10 YR 8/10  
lm: 10 YR 7/10

nares spot Scarlet

eyering color YR 10 8/10

irides

5Y 7/4

Segment 5Y 2.5/2 Lower 1/3 sparse.

legs

remarks

brood patches Upper left &gt; right. All 3 downy + feathers (sparse).

Remarks: slight black on bill tip. Brown coverts. No tail!

Probably non-breeding. Segmtd. worms in/around mesenteries.  
good infection (worms saved in ETOH). Stomach empty  
except for a few fish + crab bones/shells. Saved. 2 frozen  
tissue vials taken.

alulars RW +





Doug Bell  
1988

Catalog

172338

DAB

279

Skeleton  
+

left Wing

*Larus occidentalis occidentalis*

Location 1/2 mi. N McClellan's, Tomales Point, Point Reyes  
National Seashore, Marin Co., Calif.

date May 12, 1988

Sex ♂ LT 1.80 X 1.36 X 1.12 RT: 1.65 X 1.21 X 1.07

Weight ~~825~~ 1,235 gms Fat Good

Wing length 41.0 cm Span ~~122~~ 145 cm

Pr. length 10 29 7 27.5

9 29.5 6 25.5

8 29 5 24.0

tail length 15.5 cm

Tarsus (L) 6.34 Toes in: 4.57 mid: 6.21 out: 5.84 0.44

Head length 13.09

Bill length 6.27 post. nares: 3.68

Bill width 1.31 gape: 3.48

Bill depth Gonys: 2.11 ant. 2.08 post. 2.02  
nares: nares:

Brood patches 3!

Bill color um: 2.5Y 7/10 Spot Scarlet  
LM: 10 YR 7/10

Eyering color 10 YR 7/10 + corner

Irides 5Y 8/4 Pigment 10 YR 3/2. Light, grainy lower 1/2

Legs 5R 6/3

Remarks alulae RW + LW + Stomach full w/ massive  
amount of fish bones, some small shrimp.



172339  
Dong Bell

Catalog

DAB

*Larus occidentalis occidentalis*

location  $\frac{1}{2}$  mi N McClellan's Beach, Tomales Point, Point  
Reyes Nat'l Seashore, Marin Co., Calif.

date ~~12~~<sup>12</sup> May 1988

sex ♀ 6 ova > 4.5 mm; slightly enlarged oviduct.

weight 970 Gms

fat Heavy

wing length L 39.5 cm

span 137 cm

pr length 10 28

7 26.6

9 28.3

6 25.0

8 27.8

5 23.0

tail length 14.6 cm

tarsus(L) 6.00 toes in 4.20 mid 5.90 out 5.45 0.50

head length 11.97

bill length 5.47

post nares 3.29

bill width 1.24

gape 3.17

bill depth gonys 2.00

ant nares 1.95

post nares 1.83

brood patches 3 downy

bill color um: 10 YR 7/10  
lm: 10 YR 7/12

spot 5 R 5/14

eyering color 10 YR 7/12

irides 5 Y 8/3 Pigment 10 YR 3/2 lower  $\frac{1}{2}$  light,  
graying.

legs 10 RD 6/6

remarks Alulae RW + LW -;

Stomach full of little shrimp, saved.  
2 frozen vials.





Doug Bell  
1988

# Catalog

DAB

281

Shel. r  
Left Wing

*Larus occidentalis occidentalis*

Location: 1/2 mi N McClellan's Beach, Tomales Point, Point Reyes  
Nat'l. Seashore, Marin Co., Calif.

Date: 12 May 1988

Sex: ♀ 3 ova > 4mm; 6 ova > 2mm. 2 post ova. ~~empty~~ Enlarged oviduct.

Weight: 885 G

Fat: Moderate

Wing length: L 38.4 ~~cm~~ <sup>cm</sup>

Span: 132 cm

Pr. length 10 26.7

7 26.5

9 27.2

6 24.4

8 26.4

5 22.3

Tail length: 14.4 cm

Tarsus: L 5.67

Toes: in 3.97 out 5.71 mid 5.35

Head length: 11.63

Hallux 0.34

Bill length: 5.92

post nares: 3.27

Bill width: 1.25

gape: 3.27

Bill depth gonys: 2.05

ant nares: 1.98

post. nares: 1.85

Brood Patches: All three quite bare, but some pin-down.

Bill color: UM: 10YR 7/12 LM: 10YR 7/12 spot:

Eyeing color: 10YR 7/12 + corners

Irides: 5Y 8/6 No pigment.

Legs: 10 RP 5/6

Remarks: Rt. Tarsus missing. Stomach full of bread.  
2 frozen tissue vials taken (LHRM). Mild segmented.  
worm infestation.

alulars LW +

am

Q



Doug Bell  
1988

Catalog

2113

172480

*Larus occidentalis occidentalis*

~~281~~

282

Skeleton +  
Pt. Wing

Location: Alcatraz Island (Parade Grounds); San Francisco Co., Calif

Date: May 13, 1988

Sex: ♂ LT: 1.74 X 1.10 X 0.81 RT: 1.50 X 0.95 X 0.72

Weight: 1,220 gms Fat: Light

Winglength: 41.9 cm L Span 149.5 cm

Pr length 10 28.5 7 26.4

9 28.8 6 24.5

8 28.0 5 23.4

Tail length: 15.0 cm

Tarsus: 6.90 cm L Toes: In: 4.93 Out: 6.39 Md: 6.68

Headlength: 13.10

0.50

Bill length: 6.17 cm Post Nares: 3.78 cm

Bill width: 1.51 Gape: 3.62

Bill depth: 2.23 ant Nares: 2.14 Post Nares: 2.06

Bill color: um: 2.5 Y 7/10  
lm: 2.5 Y 7/10

Spot: 5 Y R 6/10

Eyeing color: 2.5 Y 7/10

Irides: 5 Y 8/3 One blotch lower 10 Y R 3/2

Legs: 5 RP 5/4

Brood Patches: 3.

Remarks: Trapped off 3 egg nest. Small fish - remains  
in stomach. Blood, & 2 frozen tissue vials taken.

Alulans: LW - RW -

MVZ

13604

Eggs 282: A 7.25 X 4.83 - 88 gms B: 7.07 X 4.89 - 90 gms

C: 7.07 X 4.72 - 85.5 gms ~~282~~

Q



Doug Bell  
1988

Catalog

172401

283

*Larus occidentalis occidentalis*

Location: Alcatraz Island (Parade Grounds); San Francisco Co., Calif.

Date: 13 May 1988

Sex: ♀ Fova > 0.50 cm. No enlarged oviduct.

Weight: 915 gms Fat: Good

Winglength: R 38.6 cm Span: 137 cm

Pc. length 10 27.2 7 26.6

9 27.8 6 25.0

8 27.0 5 24.6

Tail length: 15.0 cm

Tarsus: 5.90

Toes: In: 4.31 Out: 5.41 Mid: 5.82  
0.42

Head length: 11.68

Bill length: 5.06

Post Nares: 3.26

Bill width: 1.18

Gape: 2.97

Bill depth gonys: 1.98

ant  
nares: 1.96

post.

nares: 1.81

Brood Patches: 3

Bill Color um: 10YR 7/10  
Lm: 10YR 7/12

Spot: 5YR 6/10

Eyeing Color: 10YR 7/12

Irides: 5Y 8/4 No pigment.

Legs: 5RP 6/6

Remarks: Trapped off 3 eggs Alulas: LW + RW +

Remains of small fish in stomach (saved). 2 yellow  
cheese-like spots on proventricular lining.

Mate of 284. Eggs 283 A: 7.38 x 4.61 - 86 gms

B: 7.12 x 4.76 - 87 gms C: 7.54 x 4.80 - 94 gms

Eggs: ME 13010





Doug Bell  
1988

Catalog

172402

*Larus occidentalis occidentalis*

Location: Alcatraz I. (Parade Grounds); San Francisco Co., Calif.

Date: 13 May 1988

Sex: ♂ LT 1.69 X 1.09 X 0.94 RT: 1.58 X 1.08 X 0.90 cm

Weight: 1,165 gms

Fat: Light

Winglength R 41.5 cm

Span: 145.3 cm

Pr length 10 29.1 cm

7 27.2 cm

9 29.2

W

6 25.4

8 28.2

5 23.7

Tail length 15.3 cm Two central rect. With 8cm X 1cm flecking.

Tarsus: 6.72

Toes: in: 4.15 out: 5.89 mid: 6.12 0.48

Head length: 12.93

Bill length: 6.06

Post nares: 3.47

Bill width: 1.39

Gape: 3.14

Bill depth: 2.29

ant Nares: 2.18

Post Nares: 2.07

Bill Color: UM: 2.5Y 7/10 LM: 2.5Y 7/10 SPOT 5YR 5/12

Eyeing color: 2.5Y 7/10

Irides: 5Y 8/2 Pigment 10YR 7/2 Very light diffuse

sparse flecks lower 1/3

Legs: SRP 8/2

Brood Patches: 3

Remarks: Trapped off 3 eggs. Mate of 283 Brown  
coverts, small windows. Alulus LW + RW + Segmt'd.  
worms in mesenteries (mild). Stomach contains small  
fish remains, rocks, glass.





Doug Bell  
1988

Catalog

132467

*Larus occidentalis wymani*

DAB  
285

Location: <sup>East</sup> Anacapa Island, Ventura Co., Calif.

Date: 17 May 1988

Sex: ♀ 7 ova > 5mm. Enlgd. oviduct.

Weight: 860 G

Fat: Good

Winglength: 38.2 (L)

Span:

Pr Length: 10 26.7 w

7 26.6

9 27.2 w

6 23.7

8 26.7 w

5 22.9

Tail length 14.1

Tarsus: 5.77 (L)

Toes: In: 4.04 Out: 5.49 Mid: 5.38  
0.52

Headlength: 11.69

Bill length: 5.35

Post Nares: 3.34

Bill width: 1.14

Gape: 2.81

Bill depth: Gonys: 1.86

Ant Nares 1.74

Post Nares 1.58

Brood Patches: 3

Bill Color: UM: 2.5Y 7/10  
LM: 10YR 7/10

Spot: 5R 5/12

Eye ring color 10 YR 7/12 + corners

Irides: 5Y 7/4 Pigment 10 YR 3/2. Heavy flecking  
lower 1/2; scattered flecking upper.

Legs: 10RP 7/4

Remarks Trapped off 2 egg nest Empty stomach.  
1 blood & 2 frozen tissue vials taken.

Mate of 287. Measured after freezing P° 10-3



## Catalog

Douglas A. Bell  
1988

1988

*Larus occidentalis wymani*

DAB

286

Skel +  
LW

Location: East Anacapa Island, Ventura Co., Calif.

Date: 17 May 1988

Sex: ♂ T.S.N.E.

Weight: 1,050 G

Fat: Good

Winglength: 41.5 R

Span: 145

Pr length: 10 28.6 b

7 26.8 W

9 29.0 W

6 24.7 W

8 28.2 W

5 23.4

Tail length: 15.0

Tarsus: 6.55

Toes: In: 4.33 Out: 5.77 Mid: 5.84  
0.45

Headlength: 12.83

Bill length: 5.80

Post Nares: 3.49

Bill width: 1.13

Gape: ~~2.9~~ 2.92

Bill depth: gonys: 2.08

ant  
Nares: 2.01Post  
Nares: 1.90

Brood Patches: 3

Bill color: um: 2.5Y 7/10  
lm: 2.5Y 7/12

Spot Flame Scarlet

Eyering color: 2.5Y 7/12

Irides: 5Y 7/3 Pigmt. 10YR 3/3 Sparse flecking lower  
1/2.

Legs: 2.5 RP 6/4

Remarks: Trapped off 3 egg nest. Threw up a chicken bone.  
1 blood + 2 frozen tissue trials taken. Stomach  
full of chicken gunk. Took the set of eggs.  
3 eggs: P010-3





Doug Bell  
1988

Catalog

172467

*Larus occidentalis ~~occidentalis~~ wymani*

Location: East Anacapa Island, Ventura Co., Calif.

Date: 18 May 1988

Sex: ♂ LT 1.21 X 0.90 X 0.57 RT: 0.95 X 0.85 X 0.67 cm

Weight: 1,025 gms

Fat: Good

Winglength: 41 cm (L)

Span: 146.7 cm

Pr length 10 29.3

7 27.2

9 29.7

6 25.5

8 28.5

5 24.6

Tail length: 16 cm

Tarsus L 6.28

Toes: In:

4.45

M.d.

Out:

6.04

Out: 5.82

0.52

Headlength: 12.69

Bill length: 5.79

Post Nares: 3.68

Bill Width: 1.32

Gape: 3.21

Bill Depth: 2.11

Ant

Nares: 1.93

Post

Nares:

1.75

Brood Patches: 3

Bill Color: UM: 2.5Y 7/10  
LM: 2.5Y 7/12 + corners Spot: Color 13

Eyeing Color: 2.5Y 7/10

Irides: 5Y 7/3 Pigment: 10YR 7/2; heavy flecking  
lower half.

Legs: SRP 6/4

Remarks: Trapped off 2 egg nest - mate of 285.

Stomach contained chicken meat & bones. 0 10-1

Alulae: RW+ LW-

DAB

287

Shl +  
Pt. Wing

8

Steve

Anacapa - last year August 29, 1987

Bettele

163 acres



Douglas A. Bell  
1988

Catalog

*Larus occidentalis wymani*

DAB

288

Del. +  
RW

Location: East Anacapa Island, Ventura Co., Calif.

Date: 18 May 1988

Sex: ♀ Gona > 4mm; 7ova > 3mm

Weight: 890 G

Feet: Heavy.

Wing Length: 39.5 cm (L)

Span: 137.5 cm

Pr Length: 10 28

7 26.6

9 28.8

W

6 24.3

W

8 28.5

5 22.7

Tail length: 14.2 cm

Tarsus: 5.91 (L)

Toes: In: 4.12 Mid: 5.61 Out: 5.30

0.48

Head Length: 11.83

Bill Length: 5.63

Post. Nares: 3.40

Bill Width: 1.16

Gape: 2.95

Bill Depth: Gonyx: 1.90

Ant. Nares: 1.80

Post. Nares: 1.70

Brood Patches: 3

Bill Color: 4M 2.5Y 7/12  
LM 2.5Y 7/12

Spot: 14  
Flame Scarlet

Eyeing Color: 2.5Y 7/12 + corners

Irides: 5Y 7/4

Pigment 10YR 7/2

Heavy flecking

lower 7/3.

Legs: 5 ~~RP~~ RP 4/6

Remarks: Trapped off 3 egg nest. Loughed up garbage-fish + corn dinner. Stomach full of chicken bones, meat + garbage. 2 frozen mice LHKM

Alulars: RW-LW +





# Catalog

132471

*Larus occidentalis wymani*

DAB

289

Skel. +  
Left Wing

Location: East Anacapa Island, Ventura Co., Calif.

Date: 18 May 1988

Sex: ♂ LT: 1.33 x 0.97 x 0.87 RT: 1.25 x 0.85 x 0.73

Weight: 960 gms Fat: Good

Winglength: 42 L Span: 148 cm

Pc Length 10 30.3 cm 7 ~~26.1~~ 28.7

9 31.0 cm w 6 ~~24.2~~ 26.1

8 ~~28.7~~ 30.2 5 24.2

Tail length: 16.0 cm

Tarsus: 6.41 Toes: In: 4.33 Out: 5.65 Mid: 5.74  
0.40

Head length: 12.66

Bill length: 5.72

Post Nares: 3.75

Bill width: 1.30

Gape: 3.52

Bill depth: Gonyx: 2.10

ant. Nares: 1.98

Post. Nares: 1.94

Brood Patches: 3

Bill Color um: 2.5Y 7/10  
LM: 2.5Y 7/12

Spot: 6ln 15

Eyering Color: 2.5Y 7/12

Indes: 5Y 8/3 Pigment 2.5Y 3/2 - Sparse flecking  
lower 1/3

Legs: 5RP 7/2

Remarks: Trapped off 2 egg nest. Sparse flecking  
No blood. Stomach empty. Mate of ~~289~~ 291

Alulars RW + LW + Primaries 10-3





# Catalog

192472

DAB

290

Skel.  
+ wing  
Rt.

*Larus occidentalis wymani*

Location: East Anacapa Island, Ventura Co., Calif.

Date: 18 May 1988

Sex: ♀ 2ova > 0.40, 9ova > 2.5 mm

Weight: 845 gms

Fat: Good

Wingl: 38.9 cm L

Span: 137 cm

Pr length 10 28.6

7 26.5

9 29.0

6 24.5

8 28.2

5 22.8

Tail length: 14.5 cm

Tarsus: 5.79 (L) Toe: In: 3.94 Out: 5.23 Mid: 5.35  
0.52

Head length: 11.91

Bill length: 5.37

Post Nares: 3.31

Bill Width: 1.16

Gape: 2.97

Bill Depth: Corv: 1.93

Ant Nares: 1.84

Post Nares: 1.71

Brood Patches: 3

Bill Color <sup>um</sup> 2.5Y 7/10  
cm 2.5Y 7/12

Spot: Color 14

Eyering Color: 10YR 7/10 + corners

Irides: 5Y 8/4; Pigment: 10YR 3/2 Heavy flecking  
lower 2/3; scattered grain upper 1/3

Legs: 10RP 6/6

Remarks: Trapped off 3 egg nest. Thawed up chicken  
meal. 1 blood nail Mate 292. Stomach full  
of garbage - including styrofoam cup. P 10-2.

Alulars LW - RWT

3 eggs: 290 A: 7.27 x 4.91 cm 86.0 gms; B: 7.33 x 4.89

C: 7.03 x 4.74 cm 80.0 gms.

13614





# Catalog

172413

DAB

291

*Larus occidentalis wymani*

Location: East Anacapa Island, Ventura Co., Calif.

Date: 18 May 1988

Sex: ♀ 13 una > 0.30 cm

Weight: 780 gms

Fat: Good

Winglength: 38.5 cm L

Span: 134.5 cm

Pr length 10 27.2 cm

7 25.9

9 28.1

6 24.0

8 27.1

5 22.6

Tail length: 14.4 cm

Tarsus: 5.97 L

Toes In: 4.02

Out: 5.30

Mid: 5.51

0.41

Head length: 11.59

Bill length: 5.27

Post Nares: 3.35

Bill width: 1.12

Gape: 2.35

Bill depth: Gony: 1.85

Ant.

Nares: 1.75

Post.

Nares: 1.63

Brood patches: 3

Bill Color <sup>UM: 2.5Y 7/10</sup>  
LM: 2.5Y 7/10

Spt: Color 14-Scarlet

Eyering Color: 2.5Y 7/10 + corners

Irides: 5Y 7/4; Pigment: 10YR 3/2 - heavy flecking throat.

Legs: 5RP 6/4

Remarks: Mate of 289 - trapped off 2 egg nest.

Threw up Sailor-by-the-Seas; stomach had remains of small fish + meal. Otoliths saved. Pr. 10-1

Alulans LW + RWT

⑤

# Catalog

DAB  
292

Spel. +  
Rt Wing

*Larus occidentalis wymani*

Location: East Anacapa Island, Ventura Co., Calif.

Date: 18 May 1988 Sex: ♂ RT: 1.00 x 0.59 x 0.48  
LT: 1.21 x 0.67 x 0.65

Weight: 1000 gms

Fat: Good

Winglength: 42.5 cm L

Span: 149 cm

Pc. length 10 29.9

7 28.5

9 30.5

6 26.8

8 30.0

5 24.5

Tail length: 15.0 cm

Tarsus: 6.57 (L) Toes: In: 4.45 out: 5.83 Mid: 5.94

Head length: 12.68

0.49

Bill length: 5.52

Post Nares: 3.61

Bill width: 1.21

Gape: 3.34

Bill depth: Gonys: 2.11

ant nares: 2.01 Post Nares: 1.87

Brood Patches: 3

Bill Color UM 5Y 7/10  
LM 2.5Y 7/10

Spot Color 14

Eyering Color: 2.5Y 7/10

Irides: 5Y 8/4 Pigment: 10YR 7/2 Medium flecking  
lower 1/2

Legs: 10RP 5/4

Remarks Mate to 290. Trapped off 3 egg nest.

1 Blood vial, Mate 290. Fish bones in stomach

Alulae RW+ LW+, Primaries 10-2





# Catalog

DAB  
293

*Larus occidentalis wymani*

Location: Prince Island, near San Miguel Island, Santa Barbara Co., Calif.

Date 19 May 1988

Sex: ♀ Hova > 4 mm

Weight: 820 gms

Fat: Good

Winglength: R 40 cm

Span: 137.5 cm

Pc length 10 28.3

7 26.5

9 28.7

W

6 24.6

8 28.

5 22.5

Tail length: 14.3 cm

Tarsus: 5.67 L Toes In: 4.18 out: 5.49 Mid: 5.80  
0.47

Head length: 11.29

Bill length: 5.12

Post Nares: 3.16

Bill width: 1.15

Gape: 3.19

Bill depth: Gonys: 1.83

Ant. Nares: 1.76

Post Nares: 1.57

Brood Patches: 3

Bill color: 4m 2.5 Y 7/10  
Lm 2.5 Y 7/12

Spot: Color 14

Eyeing color: 10 YR 7/12

Irides: 5 Y 4/6 Pigment: 10 YR 3/2 Heavy grain  
Lower 1/2

Legs: 5 RP 6/4

Remarks: Trapped off 2-egg nest. Stomach full of garbage + paper.





# Catalog

172435

*Larus occidentalis wymani*

DAB

Location: Prince Island, near San Miguel Island, Santa Barbara Co., Calif.

294

Date: 19 May 1988

Sex: ♀ 7 ova > 3mm

Weight 780 gm

Fat: Good

Winglength: 40 cm (L)

Span: 136.5 cm

Pc length 10 28.1

7 25.7

9 28.3

6 24.7

8 27.2

5 22.0

Tail length: 14.1 cm

Tarsus: 5.70

Toes: In: 4.26

Mid: 5.69 Out: 5.46

Headlength: 11.65

0.51

Bill length: ~~5.6~~ 5.19

Post Nares: 3.21

Bill width 1.10

Gape: 2.95

Bill depth: Gonys: 1.88

Ant. Nares: 1.78

Post. Nares: 1.62

Brood Patches: 3

Bill Color: UM 2.5Y 7/10  
LM 2.5Y 7/12

Spot: Color 14

Eyes: 10YR 7/12

Irides: 5Y 7/4 No pigment.

Legs: 5RP 6/4

Remarks: Trapped off 3 egg nest. Stomach full of garbage. Mate of 295. 1 P





## Catalog

Doug Bell  
1988

172425

*Larus occidentalis wymani*

DAB

Location: Prince Island, near San Miguel Island, Santa Barbara Co, Calif.

295

Date: 20 May 1988

bel. +

Sex: ♂ LT 1.96 x 0.91 x 0.69 RT 0.95 x 0.61 x 0.51

Rt. Wing

Weight: 950 gm, Fat: Good

Winglength: 42.3 cm (L) Span: 144.5 cm

Pr. length 10 30 7 27.7

9 30.4 w 6 26.2

8 29.3 5 23.6

Tail length: 15.3 cm

Tarsus: 6.03 (R) Toe In: 4.56 Mid: 6.17 Out: 5.96  
0.50

Head length: 12.05

Bill length: 5.23

Post Nares: 3.39

Bill width: 1.33

Cape: 3.09

" depth: Gonyx 2.04

Ant. Nares: 1.96

Post. Nares: 1.90

Brood patches:

Bill color UM 2.5Y 7/10  
LM 2.5Y 7/12

Spot: color 14

Eye ring color: 2.5Y 7/10

Feet: 5Y 7/3 Pigment 10YR Gray lower 1/2

Legs: 10 RP 5/4

Remarks: Mate of 294 Threw up messy fish parts &amp; possible scallop meat - garbage?

Left Tibio-tarsal joint swollen 1.76 cm, Right one partially swollen 1.33 cm Stomach empty except for plant matter.





# Catalog

172437-

*Larus occidentalis wymani*

296

Spel 5

L. W.

Location: Prince Island, near San Miguel Island, Santa

Date: 20 May 1988

Barbara Co., Calif.

Sex: ♀ 10 ma > 3 mm

Weight: 830 gms

Fat: Good

Winglength: 40.5 (R)

Span: 140.3 cm

Pt length 10 28.2 (R)

7 25.8

9 28.7

6 24.0

8 27.9

5 22.0

Tail length: 14.3 cm

Tarsus: 5.83

Toes In: 4.43 Mid: 5.76 Out: 5.67

0.42

Head length: 12.05

Bill length: 5.47

Post Nares: 3.40

Bill width: 1.11

Cape: 2.72

Bill depth: Gonyx 1.91

ant. Nares: 1.83

Post. Nares: 1.64

Brood patches: 3

Bill color UM 2.5 Y 7/10 LM 2.5 Y 7/12

Spot: Color 14

Eyeing color: 10YR 7/10 + corners

Irises: 5Y 7/3 Pigment: 10YR 7/2 - Grainy throat; heavier lower

Legs: 5R 6/3

Y2.

Remarks: Trapped off 3 egg nest; split outer web right foot. Stomach 1/4 full w/ garbage + chicken bones





# Catalog

DAB  
297

121138

*Larus occidentalis wymani*

Location: Prince Island, near San Miguel Island, Santa Barbara Co., Calif.

Date: 20 May 1988

Sex: ♀

Weight: 800 gms

Fat: Good

Winglength: 39.5 (R)

Span: 137.5 cm

P. length 10 27.8

7 26.5

9 28.6

6 24.2

8 28.1

5 22.0

Tail length: 14.8

Tarsus: 5.55 (R) Toes: dn: 4.19 Mid: 5.47 Out: 5.32

Head length: 11.64

0.49

Bill length: 4.97

Post Nares: 3.15

Bill width: 1.11

Gape: 2.82

Bill depth: (corners) 1.82

Ant Nares: 1.75

Post Nares: 1.61

Brood Patches: 3

Bill Color: UM 5Y 7/10  
LM 2.5Y 7/10

Sport: Color 14

Eyering Color: 5Y 7/10 + corners

Irides: 5Y 7/4 Pigment (OYR) 3/2. Heavy blotching lower 1/2; scattered flecks upper 1/2.

Legs: 5RP 6/4

Remarks: Trapped off 3 egg nest. P° 10-3



Doug Bell  
1988

Catalog

172427

*Larus occidentalis wymani*

298

Location: Prince Island, near San Miguel Island, Santa

Date: 20 May 1988

Barbara Co., Calif.

Skel. +

Left Wing

Sex: ♂ LT 1.18 x 1.10 x 0.86

Weight: 1,000 gms

Fat: Good

Winglength: 41.4 (R)

Span: 143.5 cm

Pt length 10 28.6

7 27.0

9 29.1

6 25.0

8 28.3

5 23.2

Tail length: 15.2 cm

Tarsus: (R) 5.98

Toes: dn: 4.53 Mid: 6.03 Out: 5.65  
0.56

Head length: 12.39

Bill length: 5.37

Post. Nares: 3.28

Bill width: 1.27

Gape: 3.03

Bill depth Gony: 2.05

Ant. Nares: 1.93

Post. Nares: 1.81

Brood Patches: 3

Bill Coln. UM: 5Y 7/10  
LM: 2.5Y 7/10

Spot:

Eyeing Coln: 2.5Y 7/10

Slides: 5Y 8/4 Pigment 10YR - very little grain lower 1/2

Legs: 10RP 5/4

Remarks: Trapped off 3 egg nest, Prairie 10-3





# Catalog

172320

DAB

299

*Larus occidentalis occidentalis*

location Spring Ranch, <sup>near Van Damm Beach State Park, 2 mi. S</sup> Mendocino Co., Calif.

date 24 May 1988

Skel. r  
left wing

sex: ♂<sup>7</sup> LT 1.48 x 1.05 x 0.01 RT 0.97 x 0.70 x 0.60

weight 1110g fat: Good

wing length right: 41.7 span 140.5 cm

pr length 10 29.2 7 28.0

9 29.8 6 25.4

8 29.2 5 24.0

tail length: 16.2

tarsus right: 6.13 toes in: 4.4 mid 5.88 out: 5.65 <sup>halix</sup> 0.53

head length: 12.88

bill length: 5.97 post nares 3.70

bill width: 1.32 gape 3.34

bill depth gonys: 2.19 ant nares: 2.08 post nares: 1.92

brood patches: 3

bill color um: 10YR 7-12 lm: 10YR 7-12 spot color 14

eyering color: 10YR 7-12 + corners

irides: 5Y 8-2

fig.: 10YR 4-2, light grainy lower 1/2

legs: 2.5R 6-4

remarks po 10-2, stomach w/ small amount of fish meal - small stolitts taken - One of pair nesting on offshore rock: 2 frozen tissue vials. Mate of 305





# Catalog

172321

DAB

300

*Larus occidentalis occidentalis*

Location: Spring Ranch <sup>near Van Damme Beach State Park, 2 mi. S. Mendocino,</sup> Mendocino Co., Calif.

date: 5-24-88

shel. +

left wing

sex: ♀ lova 0.57, lova 0.47; 8 ova > 0.30 mm.

weight: 990 g

fat Heavy

winglength: right 40.0

span 137.0 cm

primary length 10: 28.0

7 26.7

9 28.5

6 24.9

8 28.1

5 23.6

tail length: 15.0

tarsus 5.6

toes in: 4.53 mid: 5.82 out: 5.55 <sup>lialyx</sup> 0.54

head length: 12.1

bill length 5.64

post nares: 3.46

bill width 1.25

gape: 3.03

bill depth gonys: 2.05

ant nares: 1.95

post nares: 1.87

brood patches: 3

bill color um 10YR 7-14 lm 10YR 7-14 spot color 14

eyering color: 10YR 7-12 + rear corner

irides: 5Y 8-3

pigm: 10YR ~~4~~ 4-2 sparse grains lower 1/3

legs: 10 RP 6-4

remarks P 10-1; Stomach empty. 2 frozen tissue vials

1

# Catalog

301

*Larus occidentalis occidentalis*

near Van Damme Beach State Park, 2 mi. S. Mendocino,

Location: Spring Ranch, Mendocino Co., Calif.

Date: 5-24-88

Sex: ♀ 1ova 0.57, 2ova 0.37; 1ova 0.35; 9ova > 0.20 mm

Weight: 920g

Fat: Heavy

Winglength: right: 39.7

Span: 135 cm

Pt. Length: 10 28.0

7 26.6

9 28.6

6 24.1

8 28.0

5 23.0

Tail length: 14.9

Tarsus: 5.82

Toes: ds: 4.32

Mid: 5.67

Out: 5.35

Head length: 11.77

Halcyx: 0.45

Bill length: 5.42

Post. Nares: 3.42

Bill width: 1.16

Gape: 2.67

Bill depth Gape: 1.89

Ant. Nares: 1.81

Post. Nares: 1.63

Brood patches: 3

Bill color UM - 2.5Y 7-12  
LM - 2.5Y 7-12

Spot. Color 14

Eyesing color: 2.5Y 7-10 + corners

Irides: 5Y 7-4 pigm. 10YR 4-3 sparse grains  
lower 1/3

Legs: 2.5 RP 6-4

Remarks: P<sup>o</sup> 10-3; 2 frozen tissue meals. Stomach contains fish meal → very small otoliths + small otoliths - saved.





Doug Bell  
1988

Catalog

DAB

*Larus occidentalis occidentalis*

near Van Damme Beach State Park, 2 mi. S. Mendocino,

302 location : Spring Ranch 1 Mendocino Co., Calif.

~~344~~ date 5-24-88

447 sex ♂ LT: 1.63 x 1.22 x 1.03 RT: 1.52 x 0.89 x 0.88

weight: 1225g fat: Good.

wing length right: 43.3 span : 150.3 cm

pr length 10 29.9 7 28.0 w

9 30.0 w 6 26.2 w

8 29.5 5 24.7 w

tail length: 15.5

tarsus right 6.25 toes in 4.84 mid 6.51 out 6.28 Halcyon 0.61

head length: 13.31

bill length 6.08 post nares 3.65

bill width 1.32 gape 3.40

bill depth gonys 2.24 ant nares : 2.12 post nares : 2.0

brood patches: downy 3; small bare skin patches

bill color um 10YR 7-12 lm 10YR 7-12 spot color 14

eyering color 10YR 7-12

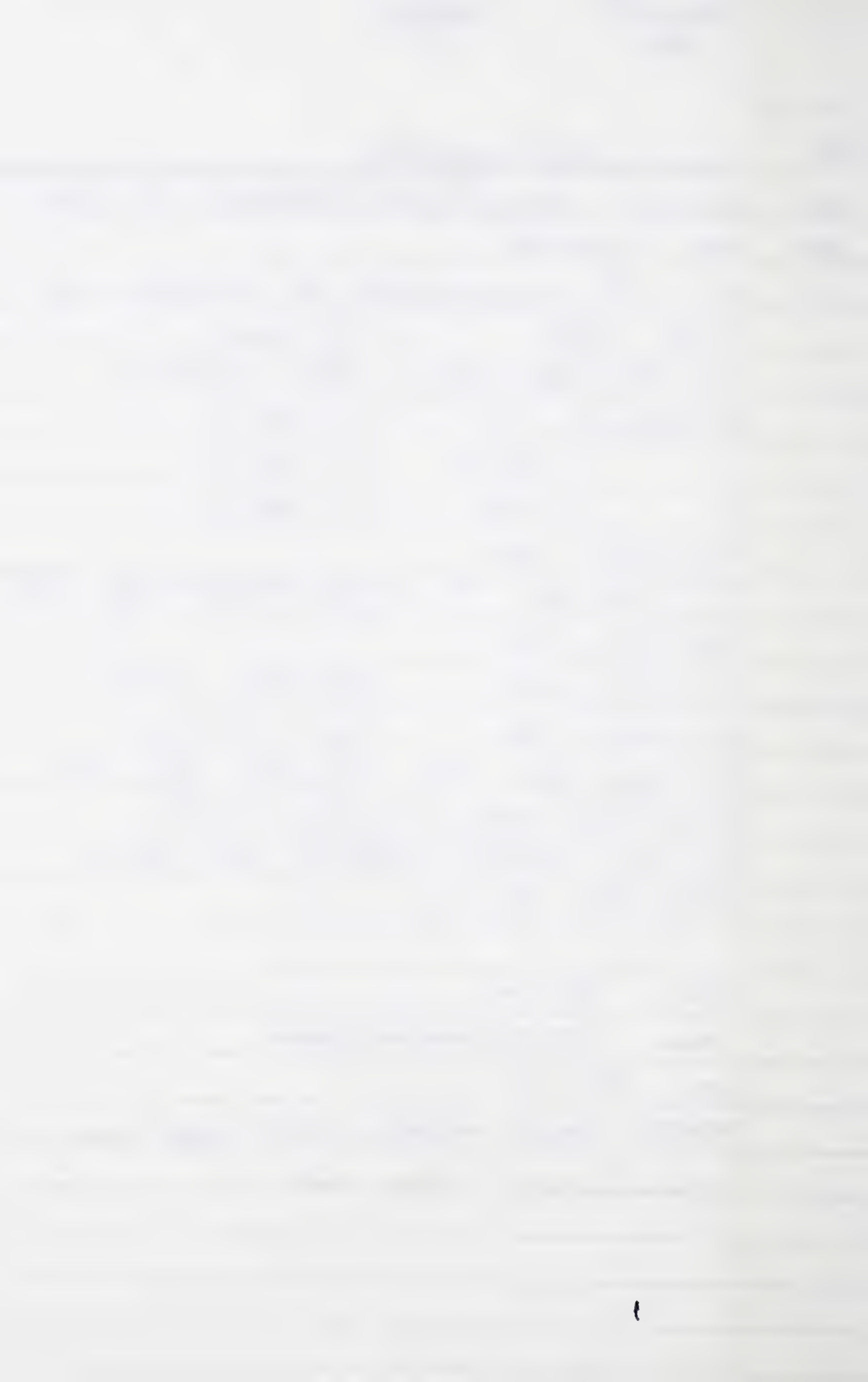
irides : 5Y 7-4

pigment: 10YR 4-3 very few grains

legs 5R 6-3

remarks : small windows, p° 10-2. Slight brown in p°.

Stomach empty. 2 frozen meals.





# Catalog

*Larus occidentalis occidentalis*

near Van Damme Beach State Park, 2 mi. S. Mendocino,

303

Location: Spring Ranch, Mendocino Co, Calif.

Date: 5-24-88

ibel. +  
Rt. Wing

Sex: ♂ LT 1.77 X 1.17 X 1.10 RT: 1.45 X 0.98 X 0.97 cm

Weight: 1245g

Fat: Good

Winglength: right: 42.5

Span: 145cm

Pr. length 10 29.5

7 27.6

9 29.7 W

6 25.8

8 29.1

5 24.2

Tail length: 16.1

Tarsus: right 5.99 Toes in: 4.65 mid: 6.31 out: 6.17

Halx: 0.57

Head length: 12.98

Bill length: 5.94

Post nares: 3.56

Bill width 1.27

Gape: 3.35

Bill depth Gonyx: 2.25 ant: 2.14 post nares: 1.98

Brood patches: 3

Bill color um: 2.5Y  
lm: 7-12

Spot: color 14

Eyering color: 10 YR 7-12

Irides: ~~10 YR 7-12~~ 5Y 8-4

pigm. 10 YR 4-2 very sparse flecks

Legs 5R 6-3

Remarks: P 10-3. Stomach empty.



# Catalog

*Larus occidentalis occidentalis*

304

Location: Spring Ranch, <sup>near Van Damme Beach State Park, 2 mi. S. Mendocino</sup> Mendocino Co., Calif.

Date 5-24-88

Sex: ♀ 4ova > 0.60; 14ova > 0.40;

Weight: 1015g Fat Heavy

Winglength right: 40.3 Span 134.5 cm

Pr. length 10 28.3 7 26.5

9 29.0 6 24.7

8 28.0 5 23.9

Tail length: 14.8

Tarsus: right: 6.13 Toes in: 4.60 mid: 5.87 out: 5.66

Halx: 0.5

Headlength: 12.14

Bill length 5.47 post. nares: 3.51

Bill width 1.19 Gape: 2.98

Bill depth - Gouys: 1.99 ant. nares: 1.85 post. nares: 1.74

Brood patches: 3

Bill color um: 10YR 7-12 Spot: Color 14

Eyering color 10YR 7-12

Irides: 5Y 8-4

pigm: 5Y 4-2 very few flecks

legs: 10 RP 6-4

Remarks: P° 10-2, Stomach empty except for few pieces glass, 2 very small otoliths.



Q. M. S.

Jong Bell  
1988

# Catalog

172324  
*Larus occidentalis occidentalis*

305 Location Spring Ranch 1, <sup>near Van Damme Beach State Park, 2 mi. S. Mendocino,</sup> Mendocino Co., Calif.

Date 5-25-88

Sex ♀ Ovaries 3ova > 5 mm; 4 ova > 2 mm.

Weight: 890 g <sup>both</sup> (- ~~left~~ breast 5 - Fat Good  
entire breast  
meat gone.

Winglength (R) Span 140.5

Pr. length 10 29.0 7 27.2

9 29.4 6 25.7

8 29.0 5 24.0

Tail length 15.7 cm

Tarsus 5.57 (R) Toes in: 4.29 mid: 5.57 out: 5.38

Head length 11.43 0.51

Bill length 5.31 post. nares 332

Bill width 1.13 Gape 2.98

Bill depth Gouys 2.00 ant. nares 1.93 post. nares 1.82

Brood patches

Bill color um: 10YR 7/12 Spot: 6/14  
lm: 10YR 7/14

Eyering color 10YR 7/14 + corners.

Irides 5Y 8/4; Pigment 10YR 3/2 Slight flecking  
lower 1/2.

Legs 10RP 6/4

Remarks Shot yesterday; 5/24/88; found today on  
beach - <sup>both</sup> ~~one~~ sides of breast eaten by raptor. Mate to  
299; may have been alive until this morning. No  
tissues taken.





Doug Bell  
1988

Catalog

*Larus occidentalis occidentalis*

Location Sugar Loaf Rock <sup>at Cape Mendocino</sup> Humboldt Co., Calif.

Date 25 May 1988

Sex ♀ Yova > 0.40; ♂ova > 0.20 cm

Weight 940g Fat Moderate

Winglength (right): 40.6 Span: 139 cm

Pr. length 10 28.0 7 26.8

9 28.7 6 25.5

8 28.0 5 23.9

Tail length: 15.2

Tarsus (right) 5.62 TCS - in: 4.21 mid: 5.55 out: 5.47  
Halyx: 0.54

Head length: 11.72

Bill length: 5.10 post. nares: 3.22

Bill width: 1.10 Gape: 2.17

Bill depth Gonys: 1.90 ant nares: 1.85 post nares: 1.72

Brood patches: 3

Bill color um: 10 YR 7-10 Spot: color 14  
lm: 10 YR 7-12

Eyering color: 10 YR 7-12

Irises: 5 Y B-6 no pigment

Legs 10 RP 6-4

Remarks Shot on beach. Stomach full w/ fish, otolith  
saved - medium-size fish. 2 frozen tissue meals,  
segmt'd. worms in mesenteries - moderate

Alulars: RW + LW -; P 10-1.





# Catalog

172307

307

*Larus occidentalis occidentalis* at Cape Mendocino  
Location: Sugarloaf Rock, Humboldt Co, Calif.

Date: 5-25-88

Sex: ♂ LT: 1.57 x 1.28 x 1.22 RT: 1.46 x 1.16 x 1.07

Weight: 1090g Fat Heavy

Winglength(right): 42.6 Span: 144.0 cm

Pr. length	10	29.0	7	27.4
	9	29.4	6	25.4
	8	28.7	5	23.4

Tail length: 16.0

Tarsus: right: 6.16 Toes in: 4.68 mid: 6.15 out: 5.91  
Hallux: 0.39

Head length: 12.57

Bill length: 5.70 post. nares: 3.51

Bill width: 1.25 Gape: 3.35

Bill depth - Gonys: 2.16 ant nares: 2.09 post nares: 1.93

Brood patches: 3

Bill color um: 2.5Y 7-10 Lm: 10YR 7-10 Spot: color 15

Eyering color 10YR 7-10

Irides: 5Y 8-4

pigment: 10YR 2-2 grainy lower 1/3

Legs: 5 RP 6-6

Remarks Shot on beach. Stomach empty except for a couple rocks. 2 frozen tissue meals.  
Alulae RW + LW +;

Shel. +  
Left wing





# Catalog

142108

308

Skel +  
R. Wing

*Larus occidentalis occidentalis* <sup>at Cape Mendocino,</sup>  
Location: Sugarloaf Rock, Humboldt Co., Calif.

Date May 25, '88

Sex: ♀ 4 ova > 0.50; 5 ova > 0.40 cm

Weight: 975 Fat Good

Wing length: right 39.0 Span: 137 cm

Pr. length 10 27.0 7 26.0

9 27.8 6 24.3

8 27.0 5 2<sup>3</sup>~~2~~.1

Tail length: 15.0

Tarsus(right) 5.70 Toes-in: 4.23 mid: 5.45 out: 5.40  
Halyx: 0.38

Head length: 11.7

Bill length: 5.32 post. nares: 3.22 ✓

Bill width: 1.27 Gape: 3.18

Bill depth - Gonys: 1.90 ant nares: 1.85 post nares: 1.68

Brood patches: 3

Bill color um: 10YR 7-10 Lm: " Spot Color 19

Eyering color 10YR 7-10 + corners

Irises: 5Y 8-6 no pigment

Legs: 2.5 RP 6-6

Remarks: Shot on beach; stomach w/ medium size fish. 2 frozen tissue nails. P 10-1; Alulae LW + RW +





# Catalog

*Larus occidentalis occidentalis* <sup>at Cape Mendocino,</sup>

309

Location: Sugarloaf Rock, Humboldt Co., Calif.

Date May 25 88

Sex: ~~♀~~ ♂ LT: 1.98 x 1.52 x 1.28 RT 1.53 x 1.19 x 0.97

Weight: 1320g

Fat Good

Wing length: right: 41.5

Span: 145.5 cm

Pr. length 10 29.2

7 27.4

9 29.6

6 25.5

8 28.7

5 23.7

Tail length: 15.9

Tarsus right 5.93 Tars-in: 4.52 mid: 6.00 jut: 6.04

Halcyx: 0.57

Head length: 12.72

Bill length: 5.61

Post Nores: 3.65

Bill width: 1.32

Gape: 3.33

Bill depth Gonyx: 2.23 ant nores: 2.20 post nores: 2.01

Broad patches: 3

Bill color UM: 2.5Y 7-12 LM: 10YR 7-10 Spot: Color 15

Eye ring color: 10 YR 7-10

Irises: 5Y 8-4

pigment: 10 YR 2-2 heavy grains lower 1/2

Legs: 5RP 6-4

Remarks: right foot swollen. Shot on beach.

Stomach full of fish meal + small minnows.

Segmented worms [moderate] Alulae LW + RWT

P 10-1





# Catalog

DAB

310

Shel +

LW

*Larus occidentalis occidentalis*  
at Cape Mendocino.

Location: Sugarloaf Rock, Humboldt Co., Calif.

Date: May 25 1988

Sex: ♂ LT: 1.27 X 0.87 X 0.76 RT: 1.37 X 1.05 X 1.08 cm

Weight: 1130g

Fat: Good

Wing length: right: 42.3

Span: 147.5 cm

P. length 10: 28.9

7 27.5

9 29.7

6 25.8

8 28.9

5 24.0

Tail length: 15.6

Tarsus: right 6.39

Tars: Ln: 4.66 Mid: 6.12 Out: 5.92

Halcyx: 0.94

Head length: 12.92

Bill length: 5.76

Post Nares: 3.57

Bill width: 1.34

Cape: 3.41

Bill depth - Gonyx: 2.23

ant. Nares: 2.16

Post: Nares 1.97

Brood Patches: 3 partially down.

Bill Color um: 10YR 7-10  
lm: 10YR 7-12

Spot: color 15

Eyering Color: 10YR 7-10 + corners

Irides: 5YB-4

Pigment: 10YR 3-2 light grains lower 1/3

Legs: 10RP 6-4

Remarks: Shot on beach. 2 frozen tissues vials. Stomach empty except for a few small fish vertebrae - saved.

Alular RW + LW +





# Catalog

DAB

311

*Larus occidentalis* <sup>occidentalis</sup> Pilot Rock, 1 km S of

Location: Trinidad Head, Humboldt Co., Calif.

Date: May 27, 1988

Sex: ♂ LT: 1.55 x 1.35 x 1.30 RT: 1.09 x 0.87 x 0.76

Weight: 1150g wet Fat Moderate.

Wing length: right: 42.5 span: 146 cm

Pr. length: 10: 28.9 7: 27.8

9: 29.6 6: 26.1

8: 29.2 5: 24.9

Tail length: 16.7

Tarsus right: 6.24 toes in: 4.63 mid: 6.23 out: 5.97

Head length: 12.63 Halix: 0.53

Bill length 5.80 Post. nares: 3.45

Bill width 1.23 Gape: 3.30

Bill depth Gonyx: 2.11 ant. nares: 2.09 post nares: 1.97

Broad patch: 3

Bill color - UM: 2.5Y 7-10 LM: 2.5Y 7-10 spot color 14

Eyering color 10 YR 7-10

Irides 5Y 8-6

pigment: 10 YR 3-2 very little flecking lower 1/3

Legs: 10 RP 6-6

Remarks: Shot off boat. Stomach contains a few remains of crab shells. Segregated worms around kidneys (moderate) - saved. 2 frozen tissue meals. p<sup>o</sup> 10-3.





# Catalog

DAB

312

*Larus occidentalis occidentalis* Pilot Rock, 1 km S

Location: Trinidad Head, Humboldt Co., Calif.

Date: May 27, 1988

Sex ♂ LT: 1.97 x 1.41 x 1.42 RT: 1.67 x 1.08 x 1.11

Weight 1330g wet Fat Slight.

Wing length right: 43.0 Span: 146.5 cm

For. length 10 29.8 7 28.4

9 30.2 6 27.0

8 30.0 5 25.0

Tail length: 16.5 cm

Tarsus right: 6.01 Toes m: 4.69 middle: 6.22 dist: 6.21

Head length: 13.36

Halux: 0.47

Bill length: 6.15

post nares 3.70

Bill width: 1.39

Gape: ~~1.3~~ 3.31

Bill depth Goups: 2.29

and nares: 2.16

post nares: 2.05

Brood patches: 3

Bill color UM: 2.5Y 7-10 LH: 10YR 7-12 spot: color 15

Eye/iris color 10YR 7-10 + corners

Irides: 5Y 8-4

pigment: 10YR 2-2 with light graying lower 1/3

Legs: 10 RP 6-4

Remarks Shot off boat. Heavy reg'd worm infestation in intestines. Stomach w/ 1 5" fish. 2 frozen tissue vials. Alulae LW + RW + P 10-1





## Catalog

DAB

313

*Larus occidentalis occidentalis*Location: <sup>Pilot Rock, 1 km S</sup> Trinidad Head, Humboldt Co., Calif.

Date May 27, 1988

Sex ♂ LT: 1.65 x 1.49 x 0.98 RT: 0.97 x 0.91 x 0.91

Weight: 1225g wet Fat Moderate

Wing length right: 43.5 Span: 146.0 cm

Pr. length: 10 29.7 7 28.1

1 29.7 6 26.0

3 29.2 5 24.7

Tail length: 15.6

Tarsus right: 6.18 Toe in: 4.57 mid: 6.02 out: 5.97

Head length: 13.02

Height: 0.52

Bill length: 5.55 Toe Nares: 3.61

Bill width: 1.24 Gape: 3.37

Bill depth Gonyx: 2.15 ant nares: 2.05 post nares: 1.79

Brood patches: 3

Bill color - UM: 10YR 7-12 LM: 10YR 7-12 post: color 14

Eyering color 10YR 7-10

Irides 5Y 7-4

pigment: 10YR 4-2 very light flecking lower 1/2

Legs: 5 RP 6-6

Remarks Shot off boat. Stomach empty except for remains of egg. Heavy intestinal segmented worm infestation. 2 frozen tissue vials.





# Catalog

D4B

314

*Larus occidentalis occidentalis*

Pilot Rock, 1 km S

Location: Trinidad Head, Humboldt Co., Calif.

Date: May 27, 1988

Sex: ♂ LT: 1.57 x 1.11 x 1.00 RT: 1.17 x 0.85 x 0.86

Weight: 1275 g wet Fat: Slight

Wing length right: 43.0 Span: 144.0 cm

Pr. length 10: 29.9 2 27.6

9 30.4 4 26.9

8 29.9 5 24.9

Tail length: 15.5

Tarsus right: 6.02 Toes in: 4.63 mid: 6.26 out: 5.91

Head length: 12.73

halcy: 0.53

Bill length: 5.84

post nares: 3.65

Bill width: 1.28

Gape: 3.55

Bill depth Gouys: 2.22 ant nares: 2.10 post nares: 1.92

Brood patches: 3

Bill color - UM: 2.5Y 7-10 LM: 2.5Y 7-12 Spr: color 14

Eye ring color: 2.5Y 8-10

Iridis 5Y 8-4

pigment 10YR 4-2 very little flecking lower 1/3

Legs 5RP 6-6

Remarks Shot off boat; Stomach full of herring & small minnows. 2 frozen tissue subs. PP 10-3;

Alulans LW + RW +





# Catalog

172281

DAB

315

*Larus occidentalis occidentalis*

Pilot Rock, 1 km S

Location 1 Trinidad Head, Humboldt Co., Calif.

Date May 27, 1988

Sex: ♂

Weight: 1380g wet Fat Moderate

Wing length right: 42.0 Span: 146.0 cm

Pr. length 10 29.2 7 28.1

9 29.8 11 26.4

8 29.5 5 24.8

Tail length: ~~44.4~~ 16.6

Tarsus right: 5.91 Tarsus left: 4.59 mid: 6.21 mid: 6.10

Head length: 13.05

body: 0.47

Bill length: 5.93 post nares: 3.68

Bill width: 1.31 Gape: 3.28

Bill depth Gonyx: 2.21 ant base: 2.17 post base: 2.11

Brood patches: 3

Bill color-UM: 2.5Y 7-10 LM: 2.5Y 7-10 Spot: color 15

Eye ring color 2.5Y 7-10

Irides 5Y 8-4

pigment 10 YR 3-2 even grains lower 1/2

Legs: 5 RP 6-6

Remarks P 10-2; Alulae LW+RW+; Stomach full

w/ large fish. 2 frozen vials. Heavy reported worm infestation





# Catalog

24B

316

Shel. +  
left Wing

*Larus occidentalis occidentalis*

Location <sup>Pilot Rock, 1 km S</sup> ^: Trinidad Head, Humboldt Co., Calif.

Date May 27, 1988

Sex ♂ LT: 1.55 x 1.31 x 1.05 RT: 1.43 x 1.05 x 1.10

Weight 1225 g wet Fat: Slight.

Wing length right: 43.2 span: 144.5 cm

Pr. length 10 29.5 7 28.9

1 30.3 6 27.1

5 30.0 5 25.8

Tail length: 16.4

Tarsus right: 5.89 Toes - m: 4.75 mid: 6.13 end: 5.94

Head length: 12.74 Culmen: 0.51

Bill length: 5.72 Post-nares: 3.57

Bill width: 1.28 Gape: 3.48

Bill depth (comps) 2.13 <sup>ant</sup> nares 2.00 <sup>post</sup> nares 1.82

Brood patches: 3

Bill color - U: 2.5Y 7-12 LM: 2.5Y 7-12 <sup>post</sup> nares color 14

Eye ring color: 10YR 7-10

Irides: 5Y 8-4

Plumage: 10YR 4-2 very little flecking lower 1/3

Legs: 5RP 6-6

Remoras shot off boat. Alulae LW + RW +

P 10-1. Stomach full of squid. 2 frozen mid.





132404

DAB

317

*Larus occidentalis occidentalis*

Location Ano Nuevo Island, San Mateo Co., Calif.

Date 7 June, 1988

Sex ♀ 2 ova &gt; 0.25 cm; rest all small.

Weight 910 gms

Fat Good; but keel slightly protruding

Wing length 39.3 cm

Span 137 cm

Tars. length 10 27.4 cm R = 24.8

7 28.0

L 23.8

3 27.0

5 22.6

Tail length 13.9 cm

Tarsus 5.59 (L)

Tarsus 4.24 5.61 5.33

Head length 11.91

Tail 0.47

Bill length 4.47

Post nares: 3.40

Bill width 1.13

Gape 3.07

Bill depth Gony: 1.96

Post nares: 1.88

Post nares: 1.75

Brood patches 3

Bill color - UM: 10YR 7/12 LM: 10YR 7/12 post: 5R 5/12

Eyering color: 10YR 7/12

Irides: 5Y 6/3

Pigment: 10YR 3/2 - sandy-scattered. Tarsus much lower 1/2 than upper 1/2.

Legs: 10RP 6/6

Remarks: Trapped off 3 egg nest. 1 blood meal.

Mate of 318. Eggs 317-A-B-C. P<sup>o</sup>: 10-3. Stomach

empty; sequent. worms in stomach. Alar: RW+ LW+;

2 frozen meals (1 large, 1 small).





# Catalog

172405

LAB

318

*Larus occidentalis occidentalis*

Location Ano Nuevo Island, San Mateo Co., Calif

Date 7 June 1988

Sex ♂ TSNE (both testis small)

Weight 1,180 gms

Tot Good

Wing length 42.4 cm (L)

Span 146.5 cm

Pr length 10 28.8 w

7 26.2

9 29.0 w

6 25.7

8 28.0 w

5 24.1

Tail length 15.3 cm

Tarsus 6.75 (L)

Toes: in: 4.64 mid: 6.26 out: 5.97

Head length 12.88

Palpe 0.69

Bill length 5.91

Post nares 3.67

Bill width 1.37

Gape 3.48

Bill depth Goups: 2.19

ant nares: 2.10

post nares: 1.95

Brown patches 3

Bill color - UM: 2.5Y 7/10 LM: 2.5Y 7/10 Spot Color 14

Eye ring color 2.5Y 7/10 + Rear corners

Irides 5Y 8/3

pigeon: 10YR 3/2 Thick, graying lower 1/2; some upper

Legs: 10RP 6/4

Remarks: Mate of 317. 1 blood meal. Threw up chunk of meat - chicken/fish? 1 *Neicea* jaw found in stomach. Both alulars present. P° 10-3





# Catalog

172406

DAB

319

*Larus occidentalis occidentalis*

Location Ano Nuevo Island, San Mateo Co., Calif.

Date 7 June 1988

Sex ♀ 4ova > 0.45 cm; rest < 1 mm.

Weight 935 gms Fat Good

Wing length 40.3 cm (A) span 140.5 cm

Pr. length 10 28.5 7 25.9

9 28.8 6 24.3

8 27.6 5 22.8

Tail length 14.2 cm

Tarsus 6.05

Toes - int: 4.52 mid: 6.04 ext: 5.72

Head length 12.07

beak 0.50

Bill length 5.46

post nares 3.29

Bill width 1.27

Gape 3.36

Bill depth Gonyx 2.01 ant nares: 1.92 post nares: 1.77

Brood patches 3

Bill color - UM: 10YR 7/12 LM: 10YR 7/12 spec. color 13

Eye ring color 10YR 7/12 + near corners

Irides 5Y 7/4.

propm: 5Y 3/2 - diffuse, mottled lower 1/3.

Legs 5RP 5/6

Remarks Trapped off 3 egg nest. Eggs 319 A-B-C.

Nereis claw in stomach. alulae LW + RW +



2



# Catalog

132407

DAB

320

Shel. +  
LW

*Larus occidentalis occidentalis*

Location Ano Nuevo Island, San Mateo Co., Calif.

Date 7 June 1988

Sex ♂ LT: 1.41 x 1.02 x 0.70 RT: 1.18 x 0.73 x 0.61

Weight 1,200 gms Fed Good

Wing length 41.5 cm R Span 146 cm

Pro. length 28.8 27.8

29.2 25.8

28.7 24.1

Tail length 16.2 cm

Tarsus 6.45 R Toe-in: 4.65 mid: 6.47 dist: 6.42

Head length 13.05 Bill 0.47

Bill length 5.78 post nares 3.55

Bill width 1.37 Gape 3.52

Bill depth Group: 2.18 ant nares 2.15 post nares 2.02

Brood patches 3

Bill color: UM: 2.5Y 7/10 LM: 10YR 7/10 Spot Color 13

Eyering color 2.5Y 7/10 + Rear corners

Irides: 5Y 8/4

pygm: 10YR 2/2. Heavy grain lower 1/2. (left)  
" band lower 1/2 (right)

Legs: 5RP 5/4.

Remarks: Trapped off 3 egg nest. Stomach contains 1 Nereis clam + small fish vertebrae.

2 frozen tissue nids taken. Alulars: both +.

P 10-3.

Tony Huntley UCSC



# Catalog

172408

*Larus occidentalis occidentalis*

321

Location Ano Nuevo Island, San Mateo Co., Calif.

Date 7 June 1988

Shel r  
RW

Sex ♀ 1 ova > 0.35; 7 ova > 0.30 cm

Weight 875 gms

Fat Good

Winglength 39.9 cm LW

Span 136 cm

Pr Length 10 28.3

7 26.0

9 28.4

6 24.4

8 27.7

5 23.0

Tail length 14.6 cm

Tarsus: 5.53

Toes: Out: 5.65 Mid: 5.72 In: 4.18  
0.53

Head length: 11.69

Bill Length: 5.41

Post Nares: 3.35

Bill width: 1.15

Gape: 2.99

Bill depth Gonys: 1.97

ant. Nares: 1.88

Post Nares: 1.75

Brood Patches: 3

Bill color: <sup>um</sup> 10YR 7/12  
<sup>LM</sup> 10YR 7/12

Spot: Gln 15

Eyeing color: 10YR 7/12

Index: 5 Y 8/4

Pigment: No pigment

Legs: 5 RP 3/4

Remarks: Trapped off 3 egg nest - threw up seaweed-coated nereis worms + clams - saved. 1 blood vial taken. Mate to 322. Eggs 322-A-B-C.

Stomach contained seaweed matter. P° 10-3.

Alulus - both +



# Catalog

172409

322

Skel. +  
RW

*Larus occidentalis occidentalis*

Location Ano Nuevo Island, San Mateo Co., Calif.

Date 7 June 1988

Sex ♂ LT: 1.65 x 1.24 x 1.19 RT: 1.24 x 0.81 x 0.70

Weight 1175 gms Fat Good

Winglength 42.2 (L) Span 147 cm

Pt Length 10 29.8 7 28.0

9 30.2 6 26.1

8 29.3 5 24.4

Tail length: 15.5 cm

Tarsus: 6.06 L Toes: In: 4.49 Mid: 6.16 Out: 5.91

Head length: 13.20

Hal: 0.50

Bill length: 6.19

Post Nares 3.64

Bill width: 1.42

Gape: 3.54

Bill depth Gonyx: 2.19

ant Nares: 2.11

Post Nares: 1.99

Brood Patches: 3

Bill color UM 10 YR 7/10  
LM 10 YR 7/10

Spot Color 14

Eyeing color: 10 YR 7/10

Irides: 5 Y 7/6

Pigment: 5 Y 3/2 Very basist band, thin, lower 1/3.

Legs: 5 RP 5/4

Remarks: Mate of 321. A few stones in stomach  
+ segmented worms (few). Stomach = both +

P<sup>o</sup> 10-2





# Catalog

*Larus occidentalis occidentalis*

323

Location Red Rock Island, San Francisco Bay, Calif.

Date 10 June 1988

S.F., Contra Costa + Marin Counties

Sex ♀ 4ova > 0.40; 10 ova > 0.30.

Weight 985 gms

Fat Heavy.

Winglength 40.9 (R)

Span 138 cm

Pa length 10 28.4

7 26.1

9 28.9

6 24.3 w

8 27.8

5 22.8 w

Tail length: 14.9 8 of 12 rect. w/ darker shafts.

Tarsus: 6.06

Toes In: 4.15

Mid: 5.78 Out: 5.65

Head length: 12.21

Hal: 0.61

Bill length: 5.69

Post Nares: 3.46

Bill width: 1.27

Gape: 3.89

Bill depth Gonys: 2.01

ant Nares: 1.87

Post Nares: 1.70

Brood Patches: 3

Bill Color UM 2.5Y 7/12  
LM 2.5Y 7/12

Spot Color 15

Eyering Color 10YR 7/10

Iris 5Y 7/3

Pigment 10YR 3/3 small flecks only

Legs 5RP 5/4

Remarks: Trapped off 3 egg nest. Threw up 6"

fish - lt. blueish on side. Nest on pebble beach. Eggs: 323-A:

83 gms; 7.17 x 4.89 cm 323 B- 84 gms 6.98 x 4.88

C 82 gms; 7.05 x 4.78 cm: 2 small fish remains in stomach - saved. P° 10-3

Measured after freezing.

Skull +  
LW





# Catalog

172143

*Larus occidentalis occidentalis*

324

Location Red Rock Island, S.F., Contra Costa & Marin Counties,  
S F Bay, Calif.

Shel r

Date 10 June 1988

RW

Sex ♂ LT: 1.39 X 0.80 X 0.72 RT: 1.01 X 0.82 X 0.66 cm

Weight 1,230 gms

Fat Good

Winglength <sup>①</sup> R 42.3 cm

Span 150 cm

P<sub>1</sub> Length 10 29.0 (RW)

7 28.0

9 30.0

6 26.5

8 29.5

5 25.1

Tail length: 15.7

Tarsus: 6.92

Toes: In: 4.60

Mid: 6.39

Out: 6.26

Bill length: 6.38

Post Nares: 3.84

Hal: 0.54

Head length: 13.34

Bill width: 1.44

Gape: 3.42

Bill depth: Comp 2.35

ant. Nares: 2.22

Post Nares: 2.01

Bill color: UM 10YR 7/10  
LM 10YR 7/12

Spot Color 15

Eyeing color: 10YR 7/10

Irides: 5Y 8/6

Plumage: 10YR 4/3 few small flecks

Legs: 5RP 7/4

Remarks: Mate to 325. Shot off 2 chick nest.

Brood Patches: 3. 1 otolith in stomach. Few very small  
semitd. worms around kidney. Dusty. PO 10-4.

Measured after freezing.





# Catalog

172344

DAB

325

skel +  
RW

*Larus occidentalis occidentalis*

Location: Red Rock Island, S.F. Contra Costa & Marin Counties, Calif.

Date: 10 June 1988

Sex: ♀ 2 ova > 2 mm; rest small.

Weight 795 gms

Fat: Good

Winglength R 39.0

Span: 136 cm

Pu length 10 28.2

7 26.2

9 28.5

6 24.4

8 26.7 27.6

5 22.6

Tail length: 14.6 cm

Tarsus: R 5.92

Toes: In: 4.27 Mid: 5.73 Out: 5.81  
0.50

Bill length: 5.47

Post Nares: 3.32

Head length: 11.69

Bill width: 1.14

Gape 2.97

Bill depth Gonys: 2.08

ant Nares: 1.96

Post Nares: 1.70

Breed Patches: 3

Bill color 4M 10 YR 7/10  
LM 10 YR 7/10

Spt color 15

Eyeing color 10 YR 7/10

Iris 5Y 8/4

Pigment No Pigment.

Legs: 10 RP 7/4

Remarks: Mate 324. Shot off 2 chick nest. Nest on grassy slope/loose rock. Squatd. worms in kidneys. Stomach w/ small minnow - otolith & contents saved. Measured after freezing. P. 10-1.





# Catalog

DAB  
326

Skel +  
RW

*Larus occidentalis occidentalis*

Location: Red Rock Island, San Francisco, Contra Costa & Marin Counties  
Calif.

Date: 10 June 1988

Sex: ♂ LT: 1.48 x 0.99 x 0.78 RT: 1.14 x 0.82 x 0.62 cm

Weight: 1,080 gms

Fat: Moderate.

Wing length: ① 41.5 cm

Span 144 cm

P length 10 29.1

7 27.6

9 29.7

6 25.9

8 28.9

5 24.2

Tail length: 15.5

Tarsus: 6.43 L Toes: In: 4.50 M.d. 6.17 Out: 6.00  
0.47

Head length 12.99

Bill length: 6.02

Post Nares: 3.72

Bill width: 1.32

Gape: 2.97

Bill depth Gonyx: 2.24

ant Nares 2.09 Post Nares: 1.94

Broad Patches: 3

Bill Color <sup>un</sup> 10YR 7/12  
<sup>LM</sup> 10YR 7/12

Spot Color 14

Eyeing Color 10YR 7/10

Irids 5Y 8/4

Pigment 10YR 7/2 light flecks, sparse, lower 1/3

Legs 10R 6/4

Remarks: Shot on beach. Ugly gray-brown liver & kidney -  
smells like garbage. Stomach full of chicken skin.

P° 10-3 Measured after freezing





Doug Bell  
1988

# Catalog

## Larus occidentalis occidentalis

327

Location: Red Rock Island, San Francisco, Marin + Contra Costa Counties

LT: 1.62 X 1.32 X 0.91

Date: 10 June 1988

Sex: ♂

RT: 1.35 X 1.00 X 0.77

Weight: 1,190 gms

Fat: Moderate

Wing length: L 42.5 cm

Span: 147 cm

P Length 10 29.8 cm

7 27.4

9 30.0

6 25.7

8 29.3

5 24.2

Tail length: 15.7 cm

Tarsus: 6.51 (R)

Tars: An: 4.77 Mid: 6.38 Out: 6.23  
0.63

Head length: 12.82

Bill length: 5.80

Post Nares: 3.71

Bill width: 1.30

Gape: 3.30

Bill depth - Gape: 2.31

Ant Nares: 2.17 Post Nares: 2.01

Brood Patches: 3

Bill color 4m 10YR 7/12  
Lm 10YR 7/12

Spot: Color 14

Eye ring color 10YR 7/14

Irides 5YB/6

Pigment 5Y 3/2 even lower 1/2 - thin

Legs 5RP 7/4

Remarks: shot on beach - off 3 egg nest: Eggs: 327A -

104 gms 7.77 X 5.08 cm; 327 B - 106 gms 7.81 X 5.05 cm

C - 100 gms 7.79 X 4.91 cm. Stomach full w/ chicken bones +

meat. Ugly <sup>gray</sup> brown liver & kidneys - smells like garbage

P<sup>o</sup> 10-2.





172-248

Doug Bell  
1988

Catalog

DAB

*Larus occidentalis occidentalis*

328

Location: Cape Arago, <sup>Gregory Point</sup> Lighthouse, Coos Co., Oregon

Skel +

Date: 14 June 1988

RW

Sex: ♂ LT: 1.50 x 1.08 x 0.97 RT: 1.05 x 0.77 x 0.72

Weight: 1,285 gms.

Fat: No Fat

Winglength: 44.8 cm (L)

Span: 152 cm

Pr Length: 10 31.3

7 28.6

9 31.3 w

6 27.0

8 30.5 w

5 24.7

Tail length: 17.1 cm

Tarsus: 6.32 (L) Toes: In. B. 4.77 M.d. 6.28 Out. 6.12

0.55

Head length: 13.69

Bill length: 6.60

Post Nares: 4.20

Bill width: 1.20

Gape: 3.47

Bill depth Gonyx: 2.19

ant.

Nares - 2.07

Post

Nares: 2.00

Brood Patches: 3 - but each has patches of down ± refeathering.

Bill Color: um 2.5Y 7/8  
lm 2.5Y 7/8

Spot: 5YR 6/12

Eyering: 2.5Y 7/8

Irides 5Y 8/4

speckles/

Flecking in lower <sup>third</sup> half. Some flecks upper

Pigment 10YR 3/2

half. Light flecking.

Legs 10RP 6/4



Remarks: Trapped off 2 egg nest. Threw up 2 large 15 cm squid + numerous small sand eels? 1 blood vial. 4 black patches on tail. Brownish tinge to Primaries, coverts. Nest near bridge, in grassy part of island. Alulars: LW + RW + P° 10-3, 1. Fish meal in stomach.





# Catalog

DAB

329

*Larus occidentalis occidentalis*

Location: Cape Arago, <sup>Gregory Point</sup> Lighthouse, Coos Co., Oregon

Date: 14 June 1988

Sex: ♀ 1ova 0.35 cm; 4 ova > 2 mm.

Weight: 885 gms

Fat: Heavy

Winglength: 35.7 cm (L)

Span: 133

P. length: 10 27

7 25.2

9 26.9 w

6 23.8

8 26.1

5 22.4

Tail length: 14.3

Tarsus: 5.44

Toe: In. 4.21

Mid: 5.56

Out: 5.49

Head length: 11.95

0.38

Bill length: 5.45

Post Nares: 3.52

Bill width: 1.15

Cape: ~~2~~ 2.88

Bill depth Conys- 2.11

Ant Nares- 1.95

Post Nares- 1.76

Brood Patches- 3

Bill Color UM 10 YR 7/12  
LM 10 YR 7/12

Spot: Color 14

Eyering: 10 YR 7/12

Iris: 5 Y 8/4

Plumage: 10 YR 3/2. Heavy even dist. of flecks: Rt - lower 1/2  
Lft - lower 2/3

Legs: 10 RP 6/6

Remarks: Trapped off 2 egg nest. 2 blood mals. Eggs: 329 A-B

Nest near Lighthouse, in grass. Alulars RW + LW +

P' 10-3. Stomach had small amount of fish meal. Otoliths

saved Egg A- 98 gms 7.60 x 5.09 Egg B - 7.56 x 4.97 cm

95 gms





# Catalog

172845

h?

*Larus occidentalis* x *glaucescens*

330

Location: Cape Arago Lighthouse, Coos Co., Oregon

Date: 14 June 1988

Sex: ♀ 3 ova > 0.45; 4 ova > 0.25 cm

Weight: ~~885~~ 1,015 gms

Fat: Good

Winglength: 40.5 cm

Span: 141 cm

Pt Length 10 28.4

7 26.7

9 29.1 w

6 25.0

8 27.8

5 22.9

Tail length: 15.0 cm - 6 of 10 Tail feather with trace pigment.  
- badly worn.

Tarsus: 5.95 (L) Toes - In: 4.22 Mid: 5.65 Out: 5.69

Head length: 12.20

0.55

Bill length: 5.48

Post Nares: 3.42

Bill width: 1.14

Gape: 3.02

Bill depth: Gape - 2.02

Ant Nares - 1.91

Post Nares - 1.83

Brood patches: 3 good ones

Bill Color UM 10YR 7/12  
LM 10YR 7/12

Spot Color 14

Eyering Corner + Upper SRP 6/6; 2.5 Y 7/10

Under 5Y 8/2

Pigment Very few tiny flecks 5Y 2.5/2

Legs 10 RP 6/4.

Remarks - Mate to 328. 1 blood vial. 2 eggs: 330 A. B

P<sup>o</sup> 10-4, 3 out, 2 blood, 1; alulars LW + RV +; Stomach

full of fish meal + bones - medium sized fish. Fins a

bone saved. Egg A: 97 g 6.74 x 5.24 cm B: 6.61 x 5.06 cm

91 g





172250  
Doug Bell  
1988

Catalog

*Larus occidentalis occidentalis*

331

Location: Cape Arago Lighthouse, Coos Co., Oregon

Date: 14 June 1988

Sex: ♂ LT: 1.51 x 0.90 x 0.85 RT: 0.71 x 0.42 x 0.37 cm

Weight: 1,160

Fat: Moderate

Wing: 42.7 cm (L)

Span: 148 cm

Pc. Length 10 29.4

7 28 W

9 30.3

6 26 W

8 29.8

5 24.5

Tail length: 15.8 cm

Tarsus: 6.75 (L)

Toes: In- 4.60 Mid- 6.22 Out- 6.00

Head length: 13.22

0.55

Bill length: 6.12

Post Nare: 3.95

Bill width: 1.34

Gape 3.34

Bill depth: Gonys 2.29

Ant Nare 2.17

Post Nare 1.98

Broad Patches - 3

Bill Color: um 10 YR 7/12  
lm 10 YR 7/12

Spot.

Eyeing Color: 10 YR 7/12

Lides Color: 5 Y 8/4

Pigment: 10 YR 3/2 - Medium flecking throughout.



Legs 10 RP 6/6

Remarks - Mate to 329 (2 egg nest). 1 blood meal

Threw up crop of sand eels. This might be a very old male -  
His bill looks quite battered, scarred. P° 10-3. Alulae RW +  
LW + Fish meal in stomach.





# Catalog

192251

*Larus occidentalis* <sup>occidentalis</sup>

332

DAB

Location Cape Arago Lighthouse, Coos Co., Oregon

Date: 15 June 1988

Skel. +

RW

Sex: ♀ 2 ova > 0.25 cm; 4 ova > 0.20 cm.

Weight: 1,015 gms

Fat: Heavy

Wingl. 40 cm (♂)

Span 140 cm

Pin length 10 29.1

7 27.6

9 29.1 w

6 25.3

8 28.5

5 23.4 = 23.4

Tail length 15.5 cm

Tarsus: 6.10 L Tars: In 4.30 Mid. 5.80 Out 5.71

Head length 11.81

0.46

Bill length: 5.41

Post Nares: 3.13

Bill width: 1.22

Gape: 2.84

Bill Depth Gorge 2.05

Ant Nares 1.99

Post Nares: 1.82

Brood Patches 3

Bill Color Um 10YR 7/12  
Lm 10YR 7/12

Spot Color 14

Eyering Color: 10YR 7/10

Feet: 1 5Y 8/2

Plum 10YR 3/2 - Thick grainy throughout.

Legs: 10RP 6/4

Remarks Trapped off 3 egg nest. 1 blood meal taken

Mate to 333. Alulae-loath. P° 10-3. Stomach empty.  
except for plant strands. 2 frozen tissue vials.





# Catalog

172846

DAB

333

333

Skel. +  
LW

*Larus occidentalis*

Gregory Point

Location: Cape Arago, Lighthouse, Coos Co., Oregon

Date: 15 June 1988

Sex: ♂ LT 0.93 x 0.66 x 0.43 RT: 0.82 x 0.65 x 0.51 cm

Weight 70.5 gms.

Fat Heavy

Wing length: 41.9 cm (L)

Span: 148

Pr. Length 10 29.3

7 27.5

9 30

6 24.8

8 29.2

5 23.7

W

Tail length: 15.4 cm

Tarsus: 6.60 (L)

Toes In 4.64

Mid 6.07

Out 6.12

0.70

Head length: 12.47

Bill length: 5.62

Post Nares: 3.63

Bill width: 1.25

Gape: 3.32

Bill depth Gonyx: 2.15

Ant

Nares - 2.11

Post

Nares - 2.04

Brood Patches: 3

Bill color um 2.54 7/12  
lm 2.54 7/12

Spot color 15.

Eyeing color: 2.54 7/10

Feet: 5Y 8/2

Pigment: 10YR 3/2. Light, grains throughout; slightly > lower 1/2

Legs: SRP 6/4

Remarks: Mate of 332. Threw up crop-loads of sand  
eels. p° 10-3. 1 segmented worm on kidney. Saved  
sand eels in formalin: these are the same fish that the  
other gulls were eating.



Doug Bell  
1988

Catalog

172840

DAB

*Larus occidentalis*

334

Location: Yaquina Head, Lincoln Co., Oregon

Date: 5/25/88

Sex: ♀ Ovary grainy

Weight: 655 G

Fat: None

Wing length: 40.5 cm (L)

Span: 136.5

Pr. Length 10

28.5

7

27.0

9

28.7

6

24.6

8

27.7

5

22.3

Tail Length: 15.1

Tarsus: 6.25 (L)

Toes: An- 4.25

Mid- 5.73

Out- 5.46

Head Length: 12.15

Hal: 0.79

Bill Length: 5.51

Post Nares: 3.33

Bill width: 1.18

Depth: 2.56

Bill depth Gony: 1.99

ant Nares 1.88

Post Nares: 1.76

Brood Patches: Feathered

Bill Color <sup>UM</sup>  
LM

10YR 7/10

Spot 14

Eyeing Color: 2.5 Y 7/10

Index: 54 8/6

Pigment: None

Legs:

Remarks: Kathy Liska - found on beach by her (BLM).

P<sup>o</sup> 10-1 No tissues saved. Cheesy turner in interclavicular air sac.



Al. Miller & Co.

W.

Doug Bell  
1988

# Catalog

172824

DAB

h- *Larus occidentalis* x *glaucescens*

335

Location: East Sand Island, Clatsop Co., Oregon

Shel +

Date: 21 June 1988

RW

Sex: ♀ 11 ova > 0.20 cm

Weight: 875 gms

Fat: Good

Winglength 41 (L)

Span: 139

Pt Length 10 28.6

7 26.7

9 29.2

6 24.9

8 28.3

5 23.0

Tail Length: 15.3

Tarsus: 6.21 L

Toes-In: 4.27 Mid: 5.68 Out: 5.33  
0.57

Headlength: 11.65

Bill Length 5.27

Post  
Nares: 3.34

Bill width 1.12

Gape 2.80

Bill depth Gonyx: 1.90

Ant  
Nares 1.77

Post  
Nares 1.66

Bill Color LM 2.5Y 7/10  
LM 2.5Y 7/10

Spot Color 14

Eyering 2.5Y 7/6

Irides 5Y 8/2

Pigment 10YR 3/2 - Moderate, sandy lower 73; feathered above.

Legs: 5RP 5/6

Brood Patches: 3

Remarks: Trapped off 2 egg nest located in grassy area west of pier & camp. Alulae both +; P 10-4, 2-1; Segmented.

Worms in intestine - saved.





# Catalog

172825

DAB

Lo  
h → WG

*Larus occidentalis* x *glaucescens*

336

Location: East Sand Island, Clatsop Co., Oregon

Shel. +

Date: 21 June 1988

RW

Sex: ♂ LT: 0.84 x 0.48 x 0.45 RT: 0.47 x 0.44 x 0.37

Weight: 1,100 G

Fat: Moderate

Winglength: 41.9 cm (L)

Span: 141

Pr Length: 10 29.1

7 27.3

9 29.7

6 25.3

8 29.3

5 23.7

Tail Length: 16.4 cm

Tarsus: 6.62 cm (L) Toe Ln - 4.40 Mid- 5.88 Ont. 5.76

Headlength: 13.09

Bill length: 6.02

Post  
Nares: 3.71

Bill width: 1.26

Gape: 3.29

Bill depth: Gonyx: 2.21

ant.  
Nares: 2.13

Post  
Nares: 2.04

Brood Patches: 3

Bill Color UM SY 7/10  
LM SY 7/10

Spot SYR 6/10

Eyering: 7.5Y 8/6

Irides: 5Y 8/2

Pigment: 10YR 7/2 - Sandy grain throat - lower

Legs: 5R 6/4

Remarks: Shot. Alulae + both; p 10-4; 2-1; ~~the~~

Stomach empty except for a few small fish vertebrae - saved.

\* NOTE: Tissues are in tubes 337: 2 mials



# Catalog

172826

BAB

337

*Larus occidentalis* x *glaucescens*

Location: East Sand Island, Clatsop Co., Oregon

Date: 21 June 1988

Sex: ♀ 7 ova > 0.20 cm

Weight: 995 g

Fat: Moderate

Winglength: 40 (L)

Span: 134.5 cm

Pr. Length 10 27.2

7 25.5

9 27.9

6 24.2

8 26.6

5 22.5

Tail Length: 14.6 cm

Tarsus: 5.85 (L)

Toes: In: 4.14

Mid: 5.49 Out: 5.33

0.55

Headlength: 12.09

Bill Length: 5.42

Post. Nares: 3.45

Bill width: 1.22

Gape: 2.78

Bill depth (beak): 1.97

Ant. Nares: 1.87

Post. Nares: 1.78

Brood Patches:

Bill Color UM: 10YR 7/12  
LM: 10YR 7/12

Spot: Color 14/

Eyeing 10YR 7/12

Irides 5Y 7/4

Pigment: 10YR 3/3 Very little lower half - light blotches

Legs: 5RP 6/4

Remarks: Shot, P\* 10-3; 1 1/2 in blood

\* NOTE TISSUES IN TUBES 336! Stomach full of small fish - one saved. Segments. worms in intestine.

2 frozen tissue vials.





# Catalog

172827

DAB

h → <sup>L.</sup>WG

*Larus occidentalis* x *glaucescens*

338

Location: East Sand Island, Clatsop Co., Oregon

Date: 21 June 1988

Sex: ♂ LT 1.39 x 0.96 x 0.76 RT 1.04 x 0.77 x 0.67

Weight: 1.175 G

Fat: Moderate

Winglength 44 (L)

Span 148

Pa Length 10 31.1

7 29.6

9 31.9

6 27.9

8 31.1

5 25.9

Tail Length: 17.2

Tarsus: 6.40

Toes: An. 4.56 Mid- 6.23 Out. 6.19  
0.52

Headlength: 13.22

Bill Length: 6.09

Post Nares: 3.66

Bill Width 1.29

Gape: 3.18

Bill Depth Gonyx 2.32

Ant Nares 2.21

Post Nares 2.11

Beak Patches: 3

Bill Color UM 10YR 7/12  
LM 10YR 7/12

Spot: Color 15

Eyering 10YR 7/10

Irides 5Y 8/3

Pigment. Thick grains throughout 10YR 2/2

Legs 5RP 6/4

Remarks Shot. Primaries 10-4, 2-1. Alulans + both

Stomach empty except for very small fish vertebrae.

2 frozen tissue vials.





# Catalog

172726

PAB

339

skel. +

RW

*Larus glaucescens*

Location: East Sand Island, Clatsop Co., Oregon

Date: 22 June 1988

Sex: ♂ LT: 0.85 x 0.58 x 0.48 RT: 0.62 x 0.42 x 0.33

Weight: 1275 gms.

Wing length 43.9 cm L

Span: 150

Pr. length 10 31 w

7 29.9

9 31.6 w

6 28.0

8 31.0 w

5 molting.

Tail length: 17.8 cm

Tarsus: 6.41 R

Toes-In: 4.84 Mid: 6.43 Out: 6.03  
0.59

Head length: 13.74

Bill length: 6.42

Post Nares: 4.00

Bill width: 1.42

Gape: 3.40

Bill depth Gonyx: 2.43

Ant Nares 2.32

Post Nares 2.16

Brood Patches 3

Bill color UM 5Y 7/10  
LM 5Y 7/10

Spot color 14

Eyering: 5RP 5/6

Feet 10YR 8/2

Plumage 10YR 2 1/2. Heavy thick grains throughout.

Legs 5RP 6/6

Remarks. Shot. Alulae + both. P 10-6, 3-1; 5 gone, 4 in blood. Stomach some remains of small fish, grass.

Saved stomach + testes. 2 frozen tissue vials.

Some regurg. worms in stomach - saved.



# Catalog

172828

OAB

h → Lg *Larus glaucescens* × *occidentalis*

340

Location East Sand Island, Clatsop Co., Oregon

Spel. +  
LW

Date: 22 June 1988

Sex: ♂ LT: 0.81 × 0.53 × 0.42 RT: ?

Weight: 1,135 gms.

Fat: ~~Moderate~~ Poor

Winglength: 43.5 cm R

Span: 148 cm

Pt. Length 10 31.1 W

7 29.

9 31.7 W

6 27.3

8 30.5 W

5 26.1

Tail Length: 16.8

Tarsus: 6.78 R.

Toes: In 4.56

Mid 5.98

Out: 6.06

0.44

Headlength: 13.43

Bill length: 6.15

Post Nares: 4.23

Bill width 1.41

Gape: 3.34

Bill depth: Gonyx: 2.25

Ant Nares: 2.17

Post Nares: 2.05

Brood Patches: 3

Bill color UM 2.5Y 7/10  
LM 2.5Y 7/10

Spot. Color 14.

Eyering: SRP 6/6

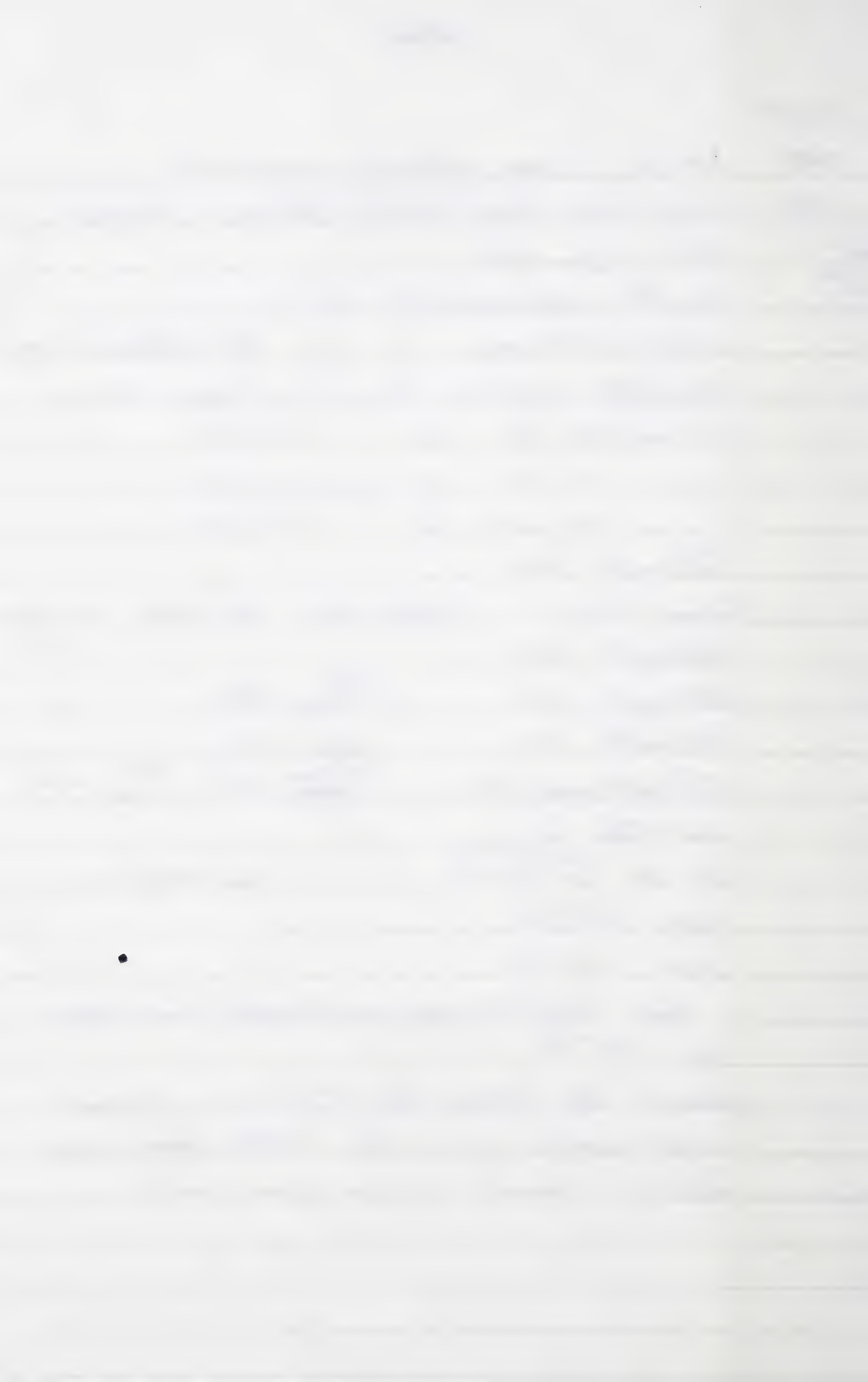
Lids: 10YR 8/2

Pigment: 10YR 2/2 - Heavy grains throughout, lower > upper.

Legs: SRP 5/6

Remarks: Shot. Alulans: + both. P° 10 -5, 3-1. Stomach empty except for a few rocks, 1 stolith, ~~some~~ some shells (?) - Saved. 2 frozen tissue vials.





# Catalog

572829

→ h?

DAB

*Larus occidentalis* x *glaucescens*

341

Location: East Sand Island, ~~East Sand Island~~

Clatsop Co., Oregon

Date: 22 June 1988

Sex: ♀ 4 ova > 0.20 cm &

Weight: 990 gms

Fat: Moderate

Winglength: 40.3 cm (R)

Span 140 cm

Pr. Length 10 27.7

7 26.8

9 28.6

6 25.1

8 28.1

5 23.3

Tail length: 14.9 cm

Tarsus: 6.00

Toes Ln: 4.35

Mid: 5.77

Out: 5.76

0.50

Head length: 12.52

Bill length: 5.67

Post Nares: 3.52

Bill width: 1.26

Gape: 3.06

Bill depth Gonys: 2.05

ant Nares: 1.96

Post Nares: 1.84

Brood Patches: 3

Bill Color UM 2.5Y 7/12  
LM 2.5Y 7/12

Spot Color 14

Eyeing: 2.5Y 7/10

Irides: 5Y 8/6

Pigment: 10YR 3/2. Graying lower 1/2.

Legs: 5RP 6/4

Remarks: Shot. Both alulae +; P10-4; 2-1. Remains of small fish in stomach - otoliths saved. 2 frozen tissue vials.

Gull  
Shit →



Doug Bell  
1988

# Catalog

172830

Lg. → h

DAB

*Larus glaucescens x occidentalis*

342

Location: East Sand Island, Clatsop Co., Oregon

Date: 22 June 1988

Sex: ♀ 4ova > 0.45 cm ; 8 ova > 0.25 cm

Weight: 1,020 gms

Fat:

Winglength: 42.0 cm L

Span: 146

P<sub>1</sub> Length 10 30.4

7 28.7

9 30.8

6 26.8

8 30.3

5 25.3

Tail length: 16.2 cm

Tarsus: 6.31

Toes In - 4.30

Mid- 5.72 Out. 5.37

Head length: 12.54 (est.)

0.64

Bill length: 5.67

Post Nares: 3.73

Bill width: 1.33

Gape: 3.15

Bill depth Gonys: 2.13

Ant  
Nares 2.02

Post  
Nares 1.88

Brood Patches 3 - re-Feathering.

Bill color: UM 2.5Y 7/12  
LM 2.5Y 7/12

Spot: Gln 15

Eyering: SRP 7/4

Irids: 10YR 8/2

Pigment: 10YR 3/2. Sandy grains throughout

Legs: SRP 5/6

Remarks: Shot. Alulans +; P° 10-1; Stomach w/  
remains of fish + vertebrae - saved. 2 frozen tissue  
nial.

W

# Catalog

172713

DAB

*Larus glaucescens*

343

Location: Port of Olympia, Olympia, Thurston Co., Washington

Date: 24 June 1988 24 June 1988

S<sup>+</sup> RW

Sex: ♂ LT: 1.65 x 1.41 x 1.23 RT: 1.32 x 1.07 x 0.91

Weight: 1,260 gms Fat: Poor

Winglength: 43.0 cm (L) Span: 150 cm

Pr. Length 10 30.1 7 28.8

9 30.2 6 26.5

8 30.1 5 24.7

Tail length: 17.4 cm.

Head Length: 13.71

Bill length: 6.21

Post Nares: 3.85

Bill Width: 1.32

Cape: 3.27

Bill Depth Gony: 2.25

Ant Nares 2.12

Post

Nares: 2.00

Brood Patches: 3

Bill Color UM 5Y 7/10 LM 5Y 7/10

Spot Color 15.

Feeding: 5RP 5/6

Slides: 5Y 7/3

Pigment: 10YR 2/2 Heavy throat; lower > upper.

Legs: 5RP 5/6

~~Remarks~~

TARSUS: 6.61

Toes: IV: 4.72 Mid: 6.34 Out: 6.14

Remarks: Trapped off 3 egg nest. This looks 0.69

like an old bird - bill is rough, & ribbed on culmen.

Foot pads have bunions, scabs. 1 Blood meal taken.

Stomach w/ crab remains. Testes & Stomach saved.

p° 10-4, 2-1. Alulans + both





# Catalog

172714

DAB

344

*Larus glaucescens*

Location: Port of Olympia, Olympia, Thurston Co., Washington

Date: 24 June 1988

Sex: ♀ 2ova 20.40 cm; 1ova 0.30 cm; 9ova 20.20 cm

Weight: 890 gms Fat: Good.

Winglength: 39.5 cm (L) Span: 136.5 cm

Pt length 10 27.6 cm w 7 26.2

9 28.3 w 6 24.8

8 27.5 w 5 22.6

Tail length: 15 cm

Head length: 11.72

Bill length: 5.36

Post Nares: 3.42

Bill Width: 1.13

Gape: 3.12

Bill Depth Longs 1.96

ant Nares 1.87 Post Nares 1.75

Brood Patches: 3

Bill color <sup>um</sup> 2.5Y 7/12  
<sup>lm</sup> 2.5Y 7/12

Spot: Color 14

Eyering Color: 5RP 4/6

Irides: 5Y 8/4

Pigment: 10YR 2/1. Heavy flecking lower 2/3, some grains upper 1/3, but sparser.

Lays: 5RP 4/6

~~Remarks~~

Tarsus: 6.02 (L) Toes In: 4.33 Mid: 5.73 Out: 5.56

Remarks: Mate to #343.

0.57

Left inner toe web split. Callouses on feet. Stomach empty except for trace rocks, glass, metal + otolith → saved. Alulae + both.

Eggs 344A: 7.18 x 4.80, 85 gms; 344B: 7.38 x 4.99; 93 gms

344C: 6.89 x 4.83; 81 gms



8

8



# Catalog

Lg/h

172804

DAB

345

shel +  
RW

*Larus glaucescens x occidentalis*

Location: Port of Olympia, Olympia, Thurston Co., Washington

Date: June 24, 1988

Sex: ♂ LT: 1.25 x 0.62 x 0.64 RT: 0.90 x 0.54 x 0.52

Weight: 1,225 gms

Fat: Moderate

Winglength: 43.7

L

Span: 151 cm

Pa. Length 10 29.8

7 28.1

9 30.2

6 26.0

8 29.7

5 24.6

Tail Length: 15.7 cm

Head length: 13.63

Bill length: 6.07

Post Nares: 4.02

Bill Width: 1.44

Gape: 3.82

Bill Depth (comps): 2.36

ant Nares 2.18

Post Nares 2.05

Tarsus: ~~6.77~~ (L)

Toes In: 4.82

Mid: ~~5.73~~ 6.13

Out: ~~5.66~~ 6.22

0.63

Brood Patches: 3

Bill Color <sup>um SY 7/10</sup> <sub>lm SY 7/10</sub>

Spot: 5YR 6/14

Eyeing: 5RP 5/6

Aniles: 10YR 8/2

Prinnt: 10YR 2/2. Thick, grainy throughout

Legs: 5RP 4/4

Remarks: Trapped off 3 egg nest. Scabs on foot pads.

Bill ~~scaly~~ scaly. Dry, scaly legs & feet. Old bird?

Small worms regurg, around testes. Alular, LW + RW +

P<sup>o</sup> 10-4, 2-1.

Eggs 345A: 6.95 x 4.78, 77 gms; 345B: 6.77 x 4.86, 77 gms

345C 6.84 x 4.68, 74 gms





# Catalog

172715

DAB

346

Shel +

RW

*Larus glaucescens x occidentalis*

Location: Port of Olympia, Olympia, Thurston Co., Washington.

Date: 24 June 1988

Sex: ♀ Ovary small, only one ova > 0.25 cm

Weight: 815 gms Fat: Moderate

Winglength: 40.5 cm R Span

Pt. Length 10 28.7 7 27.7

9 29.5 6 25.9

8 29.1 5 24.7

Tail Length: 16.2 cm

Tarsus: 6.27 R Toe-In: 4.13 Mid: 5.43 Out: 5.52

Head Length: 12.51

0.48

Bill Length: 5.65

Post Nares: 3.57

Bill Width: 1.10

Gape: 2.78

Bill Depth Comp 1.94

ant Nares 1.83 Post Nares 1.65

Breod Patches: 3

Bill Color UM - 7.5Y 7/8 LM - 7.5Y 7/10

Spot - 5YR 6/12

Eyering - 5RP 6/6

Irises - 5Y 8/2

Pigment - 10YR 2/2. Uniform grains throughout. Lower 2/3 > upper 1/3

Legs - 5RP 5/4

Remarks - Trapped off 3 egg nest. Bits of crab & mussel shell & rocks in stomach, + tiny fish bones. P<sup>o</sup> 10-5; 2+1. (443 just coming down).

Eggs 346 A: 7.59 x 5.01, 90 gms; 346 B: 7.42 x 5.10, 96 gms

346 C: 7.18 x 4.85, 83 gms



②

M

# Catalog

172716

DAB

347

*Larus glaucescens*

Location - Port of Olympia, Olympia, Thurston Co., Wash.

Date - 24 June 1988

del +  
LW

Sex - ♀ 8 ova > 0.30 cm; 6 ova > 0.20 cm

Weight. ~~810~~ 810 gms

Fat. Poor

Winglength. 40.8 cm R

Span - 139 cm

Pc. Length 10. 28.6

7 26.6

9 28.9

6 24.7

8. 28.1

5 23.5

Tail Length 16.0 cm

Tarsus: 5.70 (L)

Toes - In: 3.81

Mid: 5.50

Ont: 4.98

Head Length: 11.85

Bill Length: 5.32

Post Nares: 3.36

Bill Width: 1.06

Gape: 2.92

Bill Depth Conys: 1.85

ant Nares: 1.77

Post Nares: 1.71

Brood Patches: 3

Bill Color UM 5Y 8/8  
LM 5Y 8/8

Spot - Color 15

Eyering: SRP 5/4

Slides 5Y 8/3

Pigment. 10YR 7/2 Heavy flecking lower 7/3

Legs - SRP 5/4

Remarks - Trapped off 3 egg nest. Right foot web split, right inner toe cut off. Scaly legs, left leg w scar from line, rope?

Threw up chicken dinner. 5 rocks in stomach > 0.5 cm &.

p = 10 - 5, 3 - 1.

Eggs: 347A: 7.32 x 5.17 95 gm 347B: 7.12 x 5.07; 91 gm

347C: 6.92 x 4.91, 84 gm





# Catalog

172203

OAB

348

Skal. +  
RW

*Larus occidentalis occidentalis*

Location: Whitcomb Island, Grays Harbor, Grays  
Harbor Co., WASHINGTON

Date: 26 June 1988

Sex: ♀ 7 ova 70.20 cm

Weight: 860 gms

Fat: No Fat.

Wingl. 40.5 cm (R)

Span: 137.5

Pr length 10 28.7

7 27.2

9 29.3

6 25.3

8 28.4

5 23.9

Tail length: 15.5 cm

Head Tarsus: 5.89 (L) Toe: In- 4.28 Mid- 5.67 Out- 5.61

Head length: 12.09

HA: ~~0.72~~  
0.49

Bill length: 5.40

Post Nares: 3.54

Bill width: 1.26

Gape: 2.91

Bill depth Gony: 1.98

Ant Nares: 1.91

Post Nares: 1.79

Brood Patches: 3

Bill Color: <sup>UM 10YR 7/12</sup>  
LM 10YR 7/12

Spot Color 15

Eyes: 10YR 7/12

Irides: 5Y 8/4

Pigment: 10YR 3/2 Light Flecks lower 1/2; sparse

Legs: 10 RP 6/4

Remarks. Shot. Alulae + both; PO 10-1 (1+2 sheathed)  
Stomach empty.

10

# Catalog

172801

172800

DAB

h *Larus occidentalis* x *glaucescens*

349

Location: Whitcomb Island, Grays Harbor, Grays

Date: 26 June 1988

Harbor Co., WA

Sex: ♂ LT: 1.46 X 1.03 X 0.89 RT - Flat.

Weight: 1,180 gms

Fat: Moderate

Wing length: 43.3

Span: 146

Pa. length 10 30.2

7 28.1

9 30.3

6 26.3

8 29.8

5 25.0

Tail length: 17.2 cm

Tarsus: 6.88 (L) Toe: An. 4.57 Mid. 6.11 Out. 6.01

Head length: 13.05

0.47

Bill length: 5.90

Post Nares - 3.60

Bill Width: 1.29

Gape: 3.24

Bill Depth Congs: 2.23

ant. Nares 2.15

Post Nares - 2.01

Brood Patches - 3

Bill Color <sup>UM</sup> 2.5Y 7/10  
<sub>LM</sub> 2.5Y 7/10

Spot - color 15

Eyering - 2.5Y 7/10

Irides - 5Y 8/2.

Pigment - 10YR 7/2. Light sandy grains thruout > lower 1/2.

Legs - 5R 6/4

Remarks - Shot. + both alulas - 10-5, 3 sheath, 2x1

Stomach w/ digested ~~rem~~ remains of small crab - saved. Segments. worms in kidneys.



Q

# Catalog

172802

DAB

350

Shel +

LW

*Larus occidentalis* x *glaucescens*

Location: Whitcomb Island; Grays Harbor, Grays

Date: 26 June 1988 Harbor Co., Washington

Sex: ♂

Weight: 1,275 gms

Fat: Good

Wing: 42.5

Span 149.5 cm

Pt Length 10 29.2

7 28.8

9 30.0

6 26.5

8 29.6

5 24.5

Tail length: 16.5 cm

Tarsus: 6.22

Toes: An: 4.59 Mid: 6.11 Out: 5.89  
0.56

Head length: 12.81

Bill length: 5.85

Post Nares: 3.61

Bill width: 1.37

Gape 3.35

Bill depth Gonyx: 2.24

ant. Nares 2.14

Post. Nare 1.99

Breed Patches:

Bill Color: UM 2.5Y 7/10  
LM 2.5Y 7/10

Spot: Color 15

Eyeing Color: 10YR 7/10

Irides: 5Y 8/2

Plum: 10YR 3/2. Fine grain lower 2/3, sparser upper 1/3.

Legs: 5RP 6/4

Remarks: Shot. PO 10-4, 2-1; Stomach completely full with fish, small. Bones saved.

111



# Catalog

Lg/h

172810

DAB

351

Shel.

+  
RW

*Larus glaucescens* (→h)

Location: Pine Island, Willapa Bay, Pacific Co., Washington

Date: 27 June 1988

Sex: ♀

Weight: 945 gms

Fat: None

Winglength: 40.5 (R)

Span: 136.5 cm

Pr Length 10 28.5

7 26

9 29.0

6 24.1

8 28

5 22.5

Tail length: 15 cm

Tarsus: 6.07 (L) Toe: In- 4.30 Mid- 5.67 Out- 5.42

Head length: 11.50

0.44

Bill Length: 4.94

Post Nares: 3.29

Bill Width: 1.24

Gape: 2.94

Bill Depth: Gonyx: 1.90

Ant. Nares 1.83

Post Nares: 1.75

Brood Patches: 3 refeathering

Bill Color um 5Y8/8  
LM 5Y8/8

Spot Color 15

Eyeing Color: 5RP 6/4

Irides: 10YR 8/2

Pigment: 10YR 3/2 Even fine grains throughout

Legs: 5RP 6/4

Remarks Shot. P° 10-4, 3-1; Threw up batch of fresh polychaetes. Both ululars. Crayfish in stomach.

Heavy segmented worm infestation in intestines - saved.



L<sub>0</sub>

## Catalog

172209

DAB

*Larus occidentalis occidentalis*

352

Location: Pine Island, Willapa Bay, Pacific Co., WA

Date: 27 June 1988

Sex: ♂ LT 0.73 x 0.66 x 0.37 RT: 0.62 x 0.41 x 0.35

Weight: 1,240 gm

Fat: None

Wing length 43

Span 148 cm

Pr Length 10 28.8

7 28.1

9 29.6

6 26

8 29.5

5 24.4

Tail length: 16.3 cm

Tarsus: 6.95 (L) Toes In: 4.87 Mid: 6.30 Out: 6.19

Head length: 13.62

0.53

Bill length: 6.30

Post Nares: 3.91

Bill Width: 1.40

Gape: 2.94

Bill Depth: Gonyx 2.30

Ant Nares 2.23

Post Nares 2.12

Brood Patches 3

Bill color <sup>um</sup> 2.5 Y 7/12

LM 2.5 Y 7/12

Spot Color 14

Eyering color: 2.5 Y 7/10

Irides: 5 Y 8/4

Pigment: 10 YR 3/3 Patchy brown flecks lower 2/3

Legs: 5R 7/3

Remarks: Shot. Both alulae. P<sup>o</sup> 10-3, 1. Crayfish in stomach.





# Catalog

172811

h/w6

DAB

*Larus occidentalis* x *glaucescens*

353

Location: Pine Island, Willapa Bay, Pacific Co., WA

Spel 1

Date: 27 June 1988

LW

Sex: ♂ LT: 1.24 x 0.71 x 0.51 RT: 1.18 x 0.72 x 0.64

Weight: 1,240 gms

Fat: Moderate

Winglength: 44

Span: 149 cm

Pt length 10 34.4

7 29.1

9 31

6 26.8 w

8 30.2

5 25.6

Tail length: 16.3

Head Turn: 6.67 L Toe: In- 4.60 Mid- 6.25 Out- 5.98  
0.49

Head length: 13.52

Bill length: 6.24

Post Nares: 3.89

Bill width: 1.35

Cape: 3.34

Bill depth - Gony: 2.14

Ant. Nares: 2.12

Post Nares: 2.00

Brood Patches: 3!

Bill Color: um 10YR 2.5Y 7/12  
LM 2.5Y 7/12

Spot Color 1Y

Eyeing Color: 2.5Y 7/10

Under Color: 5Y 8/2

" Pigment: 10YR 7/2 Thick throughout.

Legs: 5RP 6/4

Remarks: 11 of 13 rectrices w/ black on tail. Both alulars.

Po 10-5, 2-1. Stomach 1/2 small crab & fish - saved.

462

463

464



# Catalog

172812

DAB

*Larus occidentalis* (sh)

354

Location: Pine Island, Willapa Bay, Pacific Co., WA.

Spel +

Date: 27 June 1988

LW

Sex: ♂ LT: 1.11 X 0.62 X 0.75 RT: 1.03 X 0.72 X 0.66

Weight: 1,210

Fat: Poor

Wing: 42.7 (R)

Span: 147 cm

R Length 10 29.6

7 28.3

9 30.2

6 26.4

8 29.8

5 25.6

Tail length: 16.7 cm

Tarsus: 6.41 (L)

Toes: An- 4.53 Mid- 6.09 Out- 5.97

Head length: 13.49

0.49

Bill length: 6.15

PostNares: 3.70

Bill Width: 1.39

Gape: 3.39

Bill Depth Gony: 2.39

Ant Nares: 2.25

Post Nares: 2.11

Brood Patches: 3

Eyering Color: 2.5 Y 7/10

Lides: 5 Y 8/4

Pigment: 10 YR 2/2. Heavy patches lower 4/2

Legs: 10 RP 6/2

Bill Color UM 2.5 Y 7/10

LM 2.5 Y 7/10

Spot: Color # 15

Remarks: Shot. Blood meal. P° 10-5, 2-1. Both alulae

Plant matter in stomach.



# Catalog

172813

DAB  
355

h *Larus occidentalis* x *glaucescens*

Location: Pine Island, Willapa Bay, Pacific Co., WA

Date: 27 June 1988

Sex: ♂ LT 0.72 x 0.52 x 0.49 RT: 0.64 x 0.47 x 0.37

Weight: 1210 gms

Fat: Poor

Wing: 43.7 (R)

Span: 148

Pt Length 10 29.9

7 28.7

9 30.7

6 27.0

8 30.5

5 25

Tail Length: 16.3 cm

Tarsus: 6.62 (L) Toe Ln- 4.37 Mid- 6.20 Out- 5.74

0.61

Head length: 13.39

Bill length: 6.01

Post Nares: 3.56

Bill width: 1.27

Gape: 3.28

Bill depth Conys- 2.25

Ant Nares 2.18

Post Nares 2.07

Brood Patches: 3

Bill color <sup>UM</sup> 2.5Y 7/10  
LM 2.5Y 7/10

Spot: Color 14

Eyeing Color: 10YR 7/10

Irides Color: 7.5Y 8/6

" Pigment: 5Y 2.5/2 Thick flecks lower 1/3, one upper 1/2.

Legs: 5RP 6/4

Remarks: Shot. Both alulars. P° 10-4, 2-1. Tumorous kidney & nail - saved. Greyfish in stomach.

Heavy intest. worms (separated).





# Catalog

172789

DAB

356

Spec +

LW

h → *Larus glaucescens occidentalis*

Location: Geese Island, Grays Harbor, Grays Harbor Co,

WA

Date: 28 June 1988

Sex: ♂ LT: 1.30 x 0.90 x 0.70 RT: ~~5.44~~ <sup>NSNE.</sup>

Weight: 1.275 gm

Fat: Good

Wing: 43 cm (R)

Span: 146.5 cm

P. Length 10 29

7 26.5

9 30.6

6 24.7

8 30

5 23.1

Tail length: 16.1

Tarsus: 6.77

Toes In: 4.56

M.d: 6.18

Out: ~~6.27~~ <sup>6.15</sup>

Head Length: 13.64

0.50

Bill length: 5.98

Post Nares: 3.88

Bill Width: 1.42

Gape: 3.41

Bill Depth Comps: 2.18

ant Nares: 2.17

Post Nares: 2.07

Brood Patches: 3

Bill color - <sup>um: 5Y 7/10</sup> <sub>lm: 5Y 7/10</sub>

Spot: Color 16

Eyering Color: 5RP 5/4

Irides: 5Y 8/2

Pigment: 10YR 2/2 Thick grains thruout > lower 2/3

Legs: 5RP 6/4

Remarks: shot p° 10-4, 2-1; + both alulae





# Catalog

172790

h

NAB

*Larus occidentalis x glaucescens*

357

Location: Goose Island, Grays Harbor Co., Washington

Date: 28 June 1988

Skul. +

2W

Sex: ♀ 10 mm > 0.20 cm

Weight: 1,045 gms

Fat: Good

Wing: 40

Span: 137

Pt. Length 10 27.5

7 27.1

9 28.2

6 25.4

8 28.1

5 23.4

Tail length 15.4

Wings 6.17 (L) Total In 4.15 Mid 5.59 Out 5.59

Head length: 12.45

0.50

Bill Length: 5.68

Post Nares: 3.69

Bill Width 1.00

Gape 2.88

Bill Depth (avg): 1.89

Ant Nares 1.83

Post Nares: 1.73

~~Bill~~ Brood Patches: 3

Bill Color  $\frac{UM}{LM} = 2.5Y \frac{7}{12}$

Spot. Color 14

Eyeing Color:  $2.5Y \frac{7}{6}$  (middle) corners: 5RP  $\frac{5}{4}$

Irides: 10YR  $\frac{8}{2}$

Pigment: 10YR  $\frac{3}{2}$  Light grains throughout.

Legs: 5RP  $\frac{7}{4}$

Remarks: Shot, + both alulae P° 10-4; 1;  
stomach full of sand shrimp.



# Catalog

172791

*Larus occidentalis* → h

DAB

Location: Goose Island, Grays Harbor Co., Washington

358

Date: 28 June 1988

Shel +

Sex: ♂ LT: 0.90 x 0.48 x 0.35 cm RT: NS

LW

Weight: 1,200 gms Fat: Poor

Wingl.: 44.7 R Span: 146.3

Pr. Length 10 31.3 7 29.4

9 32.0 6 27.9

8 31.2 5 25.2

Tail Length: 17.4

Thrus: 6.56 (L) Toe-In- 4.51 Mid- 6.12 Out- 5.87  
0.62

Head Length: 13.32

Bill Length: 6.21 Post Nares: 3.85

Bill Width: 1.31 Gape: 3.47

Bill Depth Conys: 2.14 Ant Nares: 2.07 Post Nares: 2.04

Brood Patches: 3 middle refeathering

Bill Color:  $\frac{u}{l} m \geq 2.5 \times 7/10$  Spot Color 14

Eyering:  $2.5 \times 7/10$

Irises:  $5 \times 8/4$

Pigment: 10YR 2/1. Thick grains throat & lower 1/2

Legs: 5R 7/4.

Remarks: Short P10-4; 2-1; + both alulae

2 heavy worms intestine; Stomach full of medium size crab.



359

10R

~~inner~~

eyering

5R 6/4 inner  
2.5 7/10 middle

Bill

um 2.5 7/10  
um 2.5 7/10

Spent Color 14

Iris

57 8/2  
Right 10YR 2/2

Heavy flake inner 2/3

legs 5R 5/4

# Catalog

171792

DAB

359

*Larus occidentalis* x *glaucescens*

Location: Goose Island, Grays Harbor Co., Washington

Date: 28 June 1988

Sex: ♂ TSNE

Wt. 1,245 gms

Fat. Poor

Wingl 42.7

Span 145.5

P 10 30.2

R

7 29.2

9 ~~30.2~~ 31.0

6 27.9

8 30.5

5 25.7

Tarsus: 6.41

Toe In 4.44 Mid 6.12 Out 5.78

Tail L. 17.0

0.54

Head L. 13.21

Bill Length 5.96

Post Nare 3.42

Bill Width 1.33

Gape: 3.32

Bill Depth Corns 2.13

Ant Nare 2.03 Post Nares 1.89

Broad Patches 3 (middle refeathering)

Bill Color  $4M \frac{2.5Y}{7/10}$   
Lm  $2.5Y \frac{7/10}$

Spot Color 14

Eyering Color 5RP  $\frac{6}{4}$  corners  $2.5Y \frac{7}{10}$  Middle

Iris 5Y  $\frac{8}{2}$

Pigment 10YR  $\frac{7}{2}$  Heavy flecks lower  $\frac{7}{3}$

Legs 5RP  $\frac{5}{4}$

Remarks. Shot. Slight black in bill tip. Stomach full of garbage - canned corn, chicken meat.





Douglas A. Bell  
1988

Catalog

172744

*Larus glaucescens* <sup>x occidentalis</sup> → h

360

Location: Tatoosh Island, Clallam Co., Washington

Date: 30 June 1988

Sex: ♂ LT: 1.01 x 0.77 x 0.67 RT: 1.03 x 0.53 x 0.56

Weight: 1,110 gms. Fat: Good.

Wingl. ~~40.3~~ 43.1 (R) Span: 144.8 cm

Pr Length 10 29.8 R 7 28.5

9 30.5 w 6 26.9

8 29.9 5 25.1

Tail Length: 16.9 cm

Tarsus: 6.27 Toes In 4.48 Mid: 5.89 Out: 5.76

Head L: 13.83

0.49

Bill L: 5.82

Post Nares 3.89

Bill W: 1.30

Gape: 3.39

Bill D - Gonyx: 2.16

Ant Nares 2.11

Post Nares 1.92

Brood Patches: 3

Bill Color <sup>um</sup> <sub>lm</sub> = 2.5Y 7/10

Spot Color 14

Eyeing Color: 5RP 5/4

Irides: 5Y 8/3

Pigment: 10YR 3/2. Scattered grains + flecks throughout > lower.

Legs: 5RP 5/4

Remarks. Shot. Both alulae. P° 10-3; Stomach empty.



2

Doug Bell  
1988

Catalog

172745

*Larus glaucescens* <sup>x occidentalis</sup> → h

361 Location: Tatoosh Island, Clallam Co., Wash.

Date: 30 June 1988

Sex: ♀ Bone > 0.30 cm

Weight: 1,015 gms

Fat: Good

Wing: 39.6 cm (L)

Span 135.4 cm

Pr L 10 27.1 (R)

7 25.5

9 27.4

6 24.1

8 26.7

5 23.2

Tail L: 15.5 cm

Tarsus: 6.64

Toes In- 4.43 Mid- 5.97 Out- 5.65  
0.49

Head L: 12.41

Bill L: 5.46

Post Nares: 3.57

Bill W: 1.15

Gape:

Bill D-Gonys: 1.84

ant.

Nares: 1.76

Post

Nares: 4.66

Brood Patches: 3-refeathering, middle more than upper

Bill Color <sup>um 5Y 8/8</sup>  
LM 2.5Y 7/10

Spot: Color 14

Eyeing Color: 5RP 5/4

Irides: 10YR 8/2

Plum: 10YR 7/2. Thick grain throughout, especially

Legs: 5RP 5/4

lower 4/5

Remarks: Shot. Both alulae P° 10-5, 2-1.

Two lumps in stomach.





# Catalog

172746

x occidentalis

*Larus glaucescens* → h

362

Location: Tatoosh Island, Clallam Co., Washington

Shel. +  
RW

Date: 30 June 1988

Sex: ♀ Tova 70.35; 10 ova > 0.25

Weight: 940 gms

Fat: Good.

Wing L: 41.4 (R)

Span: 137.7 cm

P. L: 10 29.0

7 27.1

9 29.4

6 25.6

8 28.3

5 24.1

Tail L: 16.0 cm

Tarsus: 6.01 R

Toes: In: 4.38 Mid: 5.67 Out: 5.27  
0.63

Head L: 12.65

Bill L: 5.78

Post Nares: 3.55

Bill W: 1.27

Gape: 2.47

Bill D - Gony: 2.04

Ant Nares: 1.98

Post Nares: 1.81

Brood Patches: 3

Bill color:  $\frac{4m}{6m} = 2.5Y 7/10$

Spot Color 14

Eyering color:  $5RP 5/4$  - Mid eye:  $5Y 8/4$

Irides:  $5Y 8/2$

Pigment:  $10YR 7/2$ . Even thick throughout.

Legs:  $5RP 5/4$

Remarks: Shot. P° 10-5; 2-1. Stomach w/ small shells.





# Catalog

172675

*Larus glaucescens*

363 Location: Tatoosh Island, Clallam Co., Washington

Date: 30 June 1988

Sex: ♀ Tova > 0.45 cm; 9ova > 0.30 cm

Weight: 985 gms Fat: Good

Wing: 38.7 L Span: 131.5

Pr L - 10 28.5 7 27.1

9 28.7 6 25.3

8 28.0 5 23.0

Tail L: 15.5

Tarsus: 5.97 (L) Toes In 4.15 Mid 5.58 Out <sup>5.56</sup>~~5.26~~  
0.51

Head L: 12.35

Bill L: 5.65 Post Nares: 3.35

Bill W: 1.21 Gape: 2.92

Bill D - Gape: 1.96 ant Nares: 1.88 Post Nares: 1.77

Brood Patches: 3

Eyering Color: 5RP 5/4 - 100%; 5RP 5/4 - 100%

Irides: 5Y 8/2

Pigment: 10YR 3/2. Thick grains, evenly dispersed, throughout.

Bill Color: UM 2.5Y 7/12 LM 2.5Y 7/12 Spot: Color 14.

Legs: 5RP 5/4

Remarks: Shot. Both alulae. P<sup>o</sup> 10-4, 1. Stomach  
w/ feather matter. Worms (non-segmented) in stomach



# Catalog

172676

364

*Larus glaucescens*

shel. +  
RW

Location: Tatoosh Island, Clallam Co., Washington

Date: 30 June 1988

Sex: ♀ Ova: 2 0.40 cm; 2 > 0.25 cm

Weight: 1,060 gms Fat: Good

Wing: 39.5 cm (L) Span: 137.3 cm

Pr L:	10	26.9	7	<del>27</del>	27.2
	9	28.5	6		25.3
	8	28.3	5	<del>23</del>	23.0

Tail L: 15.0 cm

Tarsus: 6.11 R Tail: Ju: 4.34 Mid: 5.66 Out: 5.44  
0.42

Head L: 12.24 (est)

Bill L: 5.58 Post Nares: 3.29

Bill UD: 1.03 Gape: 3.32

Bill D: Gonyx: 2.06 Ant Nares: 2.00 Post Nares: 1.85

Bill color LM: 5Y 10R 7/10 LM: 5Y 7/10 Spot: Color 14

Eyes: 5RP 6/4

Legs: 10YR 8/3

Pigment: 10YR 2/1 - Extremely thick throughout.

Spot Legs: 5RP 5/4

Remarks: Brood Patches: 3

Shot. Both ovaries. P<sup>o</sup> 10-4, 1; Stomach empty.

Worms, non-segmented, in stomach - saved.





# Catalog

172677

365

*Larus glaucescens* ~~FW~~

Location: Tatoosh Island, Clallam Co., Washington

Date: 1 July 1988

Sex: ♂ LT: 1.13 x 0.67 x 0.54 RT - X

Weight: 1,240

Fat: Moderate.

Wing L: 41 R

Span: 146

Pr L - 10 27.8

7 27.0

9 28.3

6 25.0

8 27.8

5 23.8

Tail L - 15.8 8 + 12 rect. w/ black patches

Tarsus: 6.53 L Toe du - 4.62 Mid. 6.18 Out. 5.90

Head Length: 13.42

0.60

Bill L: 6.16

Post Nares: 3.71

Bill Width: 1.28

Gape: 3.11

Bill Depth - Gape 2.17

Ant Nares 2.12

Post Nares 2.09

Brood Patches: 3

Bill Color UM: 2.5 Y 7/12 LM: 2.5 Y 7/12 Spot: 14

Eyeing Color SRP 6/4 lower: 2.5 Y 8/8.

Irides: not visible below pigment.

Pigment: 10 YR 3/2 - Complete thru entire iris.

Legs: SRP 6/4

Remarks: Shot off 3 egg nest. po 10-5, 1-2;

both alulars. 1 worm in stom. Stomach empty except for plant matter.

Mate is a GWG/h intergrade.





# Catalog

172747

366

h *Larus glaucescens* x *occidentalis*

Location: Tatoosh Island, Clallam Co., Washington

Date: 1 July 1988

Sex: ♀ 3 ova 20.45 cm; 5 ova 20.30 cm

Weight: 935 Fat: Moderate

Wing Length: 39.3 R Span: 134

Pr Length 10 27.4 7 26.2

9 27.9 6 24.7

8 27.8 5 23.0

Tail Length: 15.7

Head Length: 12.07

Bill Length: 5.58

Post Nares: 3.47

Bill Width: 1.08

Gape 2.98

Bill Depth: Gony: 1.92

ant

Nares: 1.83

Post

Nares: 1.66

Tarsus: 6.32 L Toes: dn 4.20 Mid 5.57 Out 5.34

0.49

Brood Patches: 3

Bill Color UM 2.5 Y 7/10 LM: 2.5 Y 3/10 Spot: Color 13

Eyeing Color SRP 5/4 - Wingers SRP 7/2 - Middle

Feet: 10 YR 8/2

Print: 10 YR 3/2. Grainy throughout, even dispersed, > lower 4/5.

Legs: SRP 5/4

Remarks. Mate of 366. Shot off 3 egg nest. Abular:

LW - RW + 7 P 10 - 8; 1-2. Stomach empty

except for shell or otolith? Pin worms in stomach.





# Catalog

172678

367

*Larus glaucescens*

skel +

Location: Tatoosh Island, Clallam Co., Washington

Date: 1 July 1988

LW

Sex: ♂ LT: 1.79 X 1.09 X 0.96 RT: 1.28 X 0.95 X 0.68

Weight: 1,345 gms

Fat: Good

Wing: 48.6

Span: 148.9

Pr Length 10 29.4

7 28.6

9 30.4

6 26.8

8 29.5

5 25.0

Tail Length: 16.8

Head Length: 13.54

Bill Length: 6.27

Post Nares: 3.84

Bill Width: 1.26

Gape 3.35

Bill Depth - Conys: 2.19

Ant Nares: 2.15

Post Nares: 2.02

Tarsus: 6.65

Tars: In 4.67 Mid 6.35 Out 6.05  
0.50

Brood Patches: 3

Bill Color: LM 2.5Y 7/10 LM 2.5Y 7/10 Spot Color 14

Eyering Color: 5RP 6/4

Irides: 10YR 8/2

Plumage: 10YR 3/2. Thick grainy throughout, even dispersed  
> lower 4/5

Legs: 5RP 6/4

Remarks: Mate of 366. Alar: LW + RW -

10-4, 1; Segmtd. worms intestine. Small fish  
remains in stomach.



Intertidal Wilderness

# Catalog

172679

368

*Larus glaucescens* x *occidentalis*

Location: Tatoosh Island, Clallam Co., Washington

Date: 1 July 1988

Sex: ♂ LT: 0.68 x 0.57 x 0.47 RT: 0.72 x 0.32 x 0.35

Weight: 1,245

Fat: Moderate

Wingl. 42.5 R

Span: 148.8

P. Length 10 29.5

7 28.5

9 30.0

6 26.0

8 29.6

5 B

Tail Length: 16.0

Tarsus: 6.52 L

Toe In: 4.59

Mid: 6.20

Out: 6.15

Head Length: 13.34

0.45

Bill Length: 6.01

Post Nares: 3.42

Bill Width: 1.38

Gape: 3.53

Bill Depth Gorge: 2.29

Ant Nares: 2.24

Post Nares: 2.12

Brood Patches:

Bill Color um 5Y8/6

LM 5Y8/6

Spot Color 14

Eyering Color: 5RP 6/4 Top + rear corner; 5Y8/4 front corner + Bottom.

Iris: 10 YR 8/2

Pigment: 10 YR 2/2 - Thick covering throat.

Legs: 5RP 7/2

Remarks Shot. Both alulae. P° 10-5; 2-1.

Stomach empty except for feather matter.

note - Eyering → h





# Catalog

172748

369

x occidentalis

*Larus glaucescens* (→ h)

skel +  
RW

Location: Tatoosh Island, Clallam Co., Washington

Date: 1 July 1988

Sex: ♂ LT: 0.96 x 0.76 x 0.66 RT: 0.77 x 0.67 x 0.58

into-  
eyering → h

Weight 1,210 gms

Fat: Heavy

Wingl. 44.1 L

Span: 148

P. Length 10 30.9

7 30.1

9 31.3

6 28.2

8 31.1

5 26.1

Tail Length: 17.7 cm

Tarsus: 6.55 L Toe on 4.38 Mid 5.85 Out 5.80  
0.57

Head length: 13.33

Bill Length: 6.25

Post Nares: 3.79

Bill Width: 1.32

Gape: 3.27

Bill Depth Gonyx- 2.22

Ant Nares: 2.16

Post Nares: 1.97

Brood Patches: 3

Bill Color: um 2.5Y 7/10

LM 2.5Y 7/10

Spot Color 14

Eyering Color: 5RP 6/4

Upper & Rear Corner; rest 5Y 8/4

Iris: 10YR 8/2

Pigment 10YR 7/2; thick grains throat; > lower 7/3

Legs: 5RP 6/4

Remarks Shot. Both alulae; P° 10-5; 2-1. Stomach

1/2 bit of fish meal - no bones. Blood anal taken.





# Catalog

172749

370

*Larus glaucescens* x *occidentalis*

Location: Tatoosh Island, Clallam Co., Washington

Date: 2 July 1988

~~Age~~ Sex: ♀ 3ova > 0.15 cm

Weight: 935 gms

Fat: Moderate

Wingl. 40.4 R

Span: 138.3 cm

P. Length 10 28.5

7 27.5

9 29.1

6 26.0

8 28.8

5 23.9

Tail Length: 16.0 cm

Tarsus: 5.54 L Toe: In: 4.06 Mid 5.37 Out 5.21  
0.46

Head Length: 11.93

Bill length: 5.31

Post Nares: 3.30

Bill Width: 1.30

Gape: 3.16

Bill Depth Gorge: 1.85

Ant. Nares: 1.75

Post Nares: 1.65

Brood Patches: 3

Bill Color: um 5Y 8/8

lm 2.5 Y 7/10

spot color 14

Eyeing Color: 5RP 7/2 - corners; 5RP 8/2 - rest.

Irides: 5Y 8/1

Plumage: 10YR 7/2. Heavy grain throughout > lower 2/3.

Legs: 5RP 6/4

Remarks: Trapped off 3 egg nest. Blood taken

Mate of 373. Alulus + both P 10-4, 2-1; Stomach  
w/ few small fish remains - saved.





172750

Douglas A. Bell  
1988

# Catalog

371

*Larus occidentalis occidentalis*

gsel. +  
RW

Location: Tatoosh Island, Clallam Co., Washington

Date: 2 July 1988

Sex: ♀ 5 ova > 0.25 cm

Weight: 1,000 gms

Fat: No fat

Wing: 41.4 L

Span 138.5

Pr Length 10 29.6

7 28.5

9 29.7

6 26.2

8 29.2

5 23.6

Tail Length: 15.5

Tarsus 5.67 R Toes In 4.41 Mid 5.59 Out 5.37  
0.50

Head Length: 12.18

Bill Length: 5.55

Post Nares 3.34

Bill Width: 1.18

Gape: 2.88

Bill Depth Gonys 1.98

ant Nares 1.90

Post Nares: 1.73

Brood patches: 3, refeathering middle & uppers.

Bill Color: um 5Y 8/6 LM 2.5Y 7/10 SPOT: Color 14

Eyeing: 5Y 8/6 mid; corner: 10YR 7/10

Irides: 5Y 8/3

Pigment: 10YR 7/2. Thick grains lower 1/3.

Legs: 5R 5/4

Remarks: Mate to 372 - head tossed, choking, etc. Shot.

PO 10-4, 1; both alulae. Remains of small fish vertebrae & heavy worms (non-segmented) in stomach saved.

1

2



# Catalog

172680

373 *Larus glaucescens*

Shel +  
RW

Location: Tatoosh Island, Clallam Co., Washington

Date 2 July 1988

Sex ♂ LT: 1.34 x 0.90 x 0.82 RT: 1.00 x 0.71 x 0.57

Weight 1,190 Fat: Poor

Wing 43.0 cm L Span 150

Pt Length 10 30.2 7 29.0

9 31.1 6 27.5

8 30.0 5 25.1

Tail Length: 16.5

Tarsus 6.62 Toes In 4.43 Mid 6.15 Out 5.90

Head length 13.21 0.57

Bill length 6.07 Post Nares 3.75

Bill Width 1.34 Gape 3.29

Bill Depth - Gorge 2.20 Ant Nares 2.13 Post Nares 2.00

Bill Color um 5Y 8/4 cm 5Y 7/8 SPOT: Color 15

Eyeing 5RP 5/6

Irides: 10YR 8/2

Pigment 10YR 7/1

Heavy, even lower 2/3. Some grains, dispersed upper 1/3.

Legs 5RP 6/2

Broad Patches: 3

Remarks Mate of 370. Shot off 3 egg nest.

PO 10 - ; Non-segmented worms in mouth - tongue + 2 worms saved. Fish meal, remains of small fish in stomach.



# Catalog

lg/L

172752

374

*Larus glaucescens* x *occidentalis*

Skin +  
Partial Skel.

Location: Tatoosh Island, Clallam Co., Washington

Date: 2 July 1988

Sex: ♂ TSNE

Weight: 1,290 gms

Fat: Poor

Wingl. 44.4 cm L

Span: 154 cm

Pr length 10 30.3

7 29.9

9 31.4

6 27.8

8 30.2

5 27.1

Tail length: 17.8 cm

Tarsus: 6.78 R

Toe dr- 4.91 Mid. 6.55 Out. 6.20  
0.53

Head length: 13.51

Bill length 6.52

Post Nares 3.94

Bill Width: 1.37

Gape: 3.37

Bill Depth-Corona 2.38

Ant Nare 2.28

Post Nares 2.11

Brood Patches: 3

Bill Color um: 2.5 Y  $\frac{7}{10}$  LM: 2.5 Y  $\frac{7}{12}$  Spot: Color 14

Eyeing: 5 RP  $\frac{6}{4}$

Irides: 10 YR  $\frac{8}{2}$

Plumage: 10 YR  $\frac{7}{1}$  Heavy flecking throat, lower  $\frac{7}{3}$

Legs: ~~10~~ 5 RP  $\frac{5}{6}$

Remarks: shot off territory on beach.



444

# Catalog

172655

375

*Larus glaucescens*

Skel +  
LW

Location: Gull Rock 1, (next to Flattop Isl.), San Juan Islands; Wash.

Date: July 7, 1988

Sex: ♂ LT: 1.32 x 0.99 x 0.92 RT: 1.12 x 0.88 x 0.77

Weight: 1255g

Fat: Moderate

Wingl. right 44.5

Span: 147.0 cm

Pt Length 10 30.7

7 30.0

9 31.7

6 28.3

8 31.4

5 26.5

Tail Length: 17.3

Tarsus right: 7.0 Toe Len- 4.74 Mid- 6.7 Out- 6.12

Head length: 13.87

Head: 0.60

Bill length: 6.47

PostNares: 4.11

Bill Width: 1.36

Gape: 3.31

Bill Depth Comps- 2.22

Ant Nares 2.12

Post Nares 2.02

Broad Patches: 3

Bill Color UM: 5Y7-6 LM: 5Y7-6 Spot: col. 14

Eyeing: 5RP 5/6

Irides: 5YB-3

Plum. 10YR 3-2 heavy flecking lower 1/2  
grains throughout.

Legs: 5RP 5/4

Remarks: Shot near colony. Both alulars. P<sup>o</sup> 10-5; 2-1;  
Stomach empty.

377 SRP  $\frac{5}{6}$   
SRP  $\frac{5}{4}$

378 SRP  $\frac{5}{4}$  - UP + CRO. 10 yr  $\frac{7}{4}$   
SRP  $\frac{5}{4}$



172739

~~172739~~Doug Bell  
1988

Catalog

376

Larus glaucescens

x occidentalis

H

San Juan Islands

hel +  
RW

Location: Gull Rock, next to Flattop Isl., San Juan Co.

Washington

Date: 7 July 1988

Sex: ♀! ♂ LT: 0.75 x 0.46 x 0.37 LT: 0.74 x 0.51 x 0.43

Weight: 1150g

Fat: Mod.

Wingl. right 42.0

Span: 145.5

P. L 10 28.5

7 27.6

9 29.2

6 26.0

8 29.1

5 24.5

Tail length: 16.4

Tarsus: left 6.77 Toes dn - 4.40 Mid - 5.98 Out - 5.77

Headl: 13.18

Hal 0.51

Bill length: 6.24

Post Nares: 3.78

Bill width: 1.19

Gape: 3.09

Bill Depth - Gomp: 2.15

Ant Nares: 2.08

Post Nares: 1.90

Brood Patches: 3

Bill Color: um: 5YB-6

Lm: 5YB-6

Spot: Col. 14

Eyes Color: 5 RP 5/4

Irides: 10YR 8-3

Legs: Pigment: 10YR 2-2 heavy throughout

Legs: 5 RP 5/4

Remarks: deformed Tarsus right. P° 10-5, 2-1;

Both alulae +; Shot near colony. Stomach w/ fish meal &amp; remains. Heavy worm infest. - segmented intestines.





## Catalog

LH

172656

377

*Larus glaucescens*

San Juan Islands

Location: Gull Rock next to Flattop Isl., San Juan Co., Washington

Date: July 7, 1988

Sex: ♀ 4 ova &gt; 0.45 cm; 3 ova &gt; 0.30 cm

Weight: 1025g

Fat: Good

Wing. right 41.3

Span: 139 cm

Pr. length 10 28.5

7 27.0

9 29.4

6 26.2

8 28.5

5 molted

Tail length: 15.5

Tarsus: right 5.91 Toe In - 4.67 Mid - 5.83 Out - 6.04

Head: 12.37

Hail: 0.40

Bill Length: 5.58

PostNose: 3.56

Bill Width: 1.20

Gape: 2.68

Bill Depth Gonyx: 1.95

ant  
Nose 1.91Post  
Nose: 1.76

Bill color um 5Y 8-6

um 5Y 7-6

spot

color  
15

Eyeing color: 5RP 5/6

Irides: 10YR 8-2

Pigment: 10YR 3-2 heavy flecking throughout  
clear spots in corners

Legs: 5RP 5/4

Brood Patches 3

Remarks: Shot near colony. P° 10-6 (partly destroyed from shot).

Both alulae +; Threw up crop full of minnows. Stomach  
w/ fish + nereis clear remains.



10/10

# Catalog

172657

378

*Larus glaucescens*

San Juan Islands

bel +  
LW

Location: Gull Rock, next to Flattop Isl. San Juan Co.

Date: July 7, 1988.

Washington

Sex: ♂ LT: 1.23 x 0.87 x 0.81 RT: 1.17 x 0.77 x 0.34

Weight: 1325g

Fat: Moderate

Wingl. right 44.5

Span: 146.5 cm

Pr Length 10 30.5

7 29.6

9 31.2

6 28.4

8 30.9

5 molted

Tail length: 16.5

Tarsus right: 6.7 Toes dn - 4.52 Mid - 5.90 out - 5.76

Headl. 13.20

Halcyx: 0.41

Bill Length: 6.20

Post Nares: 3.80

Bill Width: 1.25

Cape 3.48

Bill Depth Gonyx - 2.20

Ant Nares 2.17

Post Nares 1.96

Brood Patches: 3

Bill color um: 5Y 8-8 Lm: 2.5Y 7-10 Spot: Col. 14

Eyeing color: 5RP 5-4 upper & corners 10YK 7-4 lower

Irides: 10Y 8-2

Pririt: 10YR 3-2 heavy grains throughout

Legs: 5RP 5-4

Remarks: Shot near colony, P° 10-5; 3-1; Both alulars +; Heavy segmtd. worms in intestine. Very small fish remains in stomach - saved.





# Catalog

172644

379

Sbel.  
+ RW

*Larus Oglanescens x occidentalis*

Location: Colville Island <sup>San Juan Islands</sup> San Juan Co., Wash.

Date: July 8, 1988

Sex: ♂ LT - destroyed RT: 0.78 x 0.43 x 0.42

Weight: 1440g Fat Moderate

Winglength left: 45.2 Span: 151.5 cm

Pr. length: 10 31.3 7 30.2

9 32.0 6 28.8

8 31.2 5 26.3

Tail length: 17.7

Tarsus left: 6.7 Toes In 4.52 mid 6.08 out 6.02

Head length: 13.16 Hal: 0.58

Bill length: 6.22 Post nares 3.80

Bill Width: 1.30 Gape 3.46

Bill Depth - Gorge: 2.41 ant. Nares - 2.38 Post Nares - 2.18

Brood Patches: 3

Bill color um: 2.5Y7/10 LM: 2.5Y7/10 Spot: 10.14

Irises: 10YR 8/2

Pigment: 10YR 2/2 heavy throughout.

Eyering: 5RP 6/4

Legs: 5RP 5/4

Remarks: Shot near colony. R° 10-4, 2-1; Both ulcers  
Segmented. worm infect intestines. Stomach full of fish  
meal (small fish).

e

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# Catalog

172645

380

*Larus glaucescens*

Location: Colville Island, San Juan Co., Wash.

Date: July 8, 1988

Sex: ♂ LT: 0.87 x 0.67 x 0.63 RT: 0.69 x 0.59 x 0.52

Weight: 1365g

Fat: Good

Wingl. left: 45.4

Span: 153.0

Pr Length 10 31.8

7 30.3

9 32.3

6 28.5

8 31.7

5 26.8

Tail Length: 18 cm

Tarsus: right: 7.01 Toes: An: 4.68 Mid: 5.96 Out: 5.93

Head Length: 13.72

Hal: 0.56

Bill Length: 6.43

Post Nares: 3.78

Bill Width: 1.28

Gape: 2.96

Bill Depth Comp - 2.18

Ant Nares - 2.07

Post Nares - 1.94

Brood Patches: 3

Bill Color: UM: 2.54 <sup>7</sup>/<sub>10</sub> LM: 2.54 <sup>7</sup>/<sub>10</sub> Spot: col. 14

Eyering Color: 5 RP <sup>6</sup>/<sub>4</sub>

Lider: not visible

Pigment: 10 YR 2/2 heavy throughout

Legs: 5 RP <sup>5</sup>/<sub>4</sub>

Remarks: Shot near colony. P° 10-3; Both alulars.

Stomach empty.





# Catalog

172646

381

*Larus glaucescens*

Shel +  
RW

Location: Colville Island, San Juan Co., Wash.

Date: July 8, 1988

Sex: ♂ LT: 1.45 x 0.92 x 0.90 RT - destroyed.

Weight: 1220

Fat: Moderate.

Wingl. left: 42.0

Span: 142.0

Pr Length 10 29.0

7 28.5

9 29.8

6 26.5

8 29.6

5 25.7

Tail Length: 17.8

Tarsus: left: 6.13 Toes: In: 4.44 Mid: 6.07 Out: 5.86

Head length: 13.62

Hal: 0.58

Bill Length: 6.54

Post Nares: 4.17

Bill Width: 1.27

Gape: 3.30

Bill Depth Gape: 2.27

Ant Nares: 2.13

Post Nares: 1.99

Brood Patches: 3

Bill Color UM: 5Y7/10

LM: 5Y7/10

Spot: Col. 15

Eyering Wb: SRP 5/4

Lides: 5Y8/3

Pigment: 10YR 3/2 light grains lower 1/2

Legs: SRP 5/4

Remarks: Shot near colony. P° 10-5, 1-2; Shular RW only

Stomach empty. Few segmented worms in mesenteries.





29/4

172742

## Catalog

382

*Larus glaucescens* x *occidentalis*

Shot +

LW

Location: Colville Island, San Juan Co., Wash.

Date: July 8, 1988

Sex: ♂ LT: 1.62 x 1.24 x 0.96 RT: 1.34 x 1.02 x 0.77

Weight: 1250g

Fat: Poor

Wing: right 43.5

Span: 145.5

Pr. Length 10 30.0

7 28.3

9 30.7

6 26.7

8 29.6

5 29.7

Tail length: 17.0

Tarsus: right 6.02 Toes dr - 4.50 Mid - 6.0 Out - 5.75

Hall: 0.53

Head length: 13.12

Bill Length: 6.28

Post Nares: 3.87

Bill Width: 1.30

Gape: 3.60

Bill Depth Gape: 2.18

Ant Nares: 2.01

Post Nares: 1.87

Broad Patches: 3

Bill color um 5Y7/10 LM 5Y7/10 Spot: Col. 14

Eyeing color: SRP 5/4

Irides: 10YR 8/2

Pigment: 10YR 2/1 heavy throughout

Legs: SRP 5/4

Remarks: Shot near colony; Alulae LW + RW - ; P<sup>o</sup>10-4, 1;

Big fish (&gt; 15cm) in stomach. Sperm. worms kidney saved.

383 SRP 5/6  
SRP 5/6

116



172647

## Catalog

383

*Larus glaucescens*

Sgt +

RW

Location: Colville Island, San Juan Co., Wash.

Date: July 8, 1988

Sex: ♀ 5 ova &gt; 0.15 cm.

Weight: 1025g

Fat: Moderate

Wing left: 39.0

Span: 135.5 cm

Pr. L 10 29.2

7 27.2

9 29.7

6 25.5

8 29.4

5 23.8

Tail: 16.3

Tarsus: left: 5.78 Toe Ln - 4.02 Mid - 5.42 Owl - 5.33

Head length: 12.61

Hal: 0.51

Bill length: 5.62

Post Nares: 3.67

Bill Width: 1.20

Gape: 3.11

Bill Depth: Gonys - 1.92

Ant Nares 1.82

Post Nares 1.67

Brood Patches: 3

Bill Color um: 5Y7-8

LM: 5Y7/8

SPOT: color 14

Eyes: 5 RP 5/6

Iridis: 10YR 8/2

Pigment: 10YR 2/2 graying throughout throat lower 1/2

Legs: 5 RP 5/6

Remarks: Shot near colony. Both alulars; P<sup>o</sup> 10-4, 1;

Stomach w/ remains small fish. Pin worm.

ETOH vial, worms + stomach saved.



1

# Catalog

172668

384 *Larus glaucescens*

Skel +  
RW

Location: Colville Island, San Juan Co., Wash.

Date: July 8, 1988

Sex: ♂ LT: 1.50 x 0.66 x 0.53 RT: 1.09 x 0.68 x 0.50

Weight: 1290

Fat: ~~Low~~ Moderate

Wing, left 43.6

Span: 147.5

PR. Length 10 30.0

7 28.7

9 30.7

6 26.9

8 30.5

5 29.5

Tail length: 16.7

Tarsus: left 6.48 Toes In - 4.5 Mid - 6.12 Out - 5.92

Head length: 13.66

Anal: 0.42

Bill length: 6.16

Post Nares: 3.84

Bill width: 1.35

Gape: 3.45

Bill Depth Gape: 2.20

Ant Nares: 2.07

Post Nares: 1.93

Brood Patches: 3 refeathering

Bill color um: 7.5Y 7-6 Lm: 7.5Y 7/6 Spot 5YR 6-10

Eyes: 5RP 5/4

Iris: 5Y 8/3

Plum: 10YR 3-2 graying through out greater lower 1/2.

Legs: 5RP 5/4

Remarks: Shot near colony. Both alulae; P° 10-4, 2-1.

Sequenced nam + pin nam - stomach. Stomach empty except for casting.





# Catalog

172669

385

Larus Glauceseus

Location: Colville Island, San Juan Co., Wash.

Date: July 8, 1986

Sex: ♀ Lna 1.5 cm; 67 0.60 cm; 57 0.50 cm. <sup>Enlrgd oviduct.</sup>

Weight: 1040g

Fat: Moderate.

Wingl. left 40.9

Spec 134.0

Pr. length 10 28.4

7 27.2

9 29.0

6 25.8

8 28.5

5 Broken

Tail length: 15.4

Tarsus: left: 6.34 Tarsus dn - 4.30 Mid - 5.72 Out - 5.52

Headlength: 11.34

Hal 0.58

Bill length: 5.39

Post Nares: 3.32

Bill Width: 1.20

Gape: 2.68

Bill Depth Gape: 1.88

Ant Nares 1.85

Post Nares 1.74

Brood Patches: 3

Bill Color: um: 5Y8-6 LM 5Y7-6 Spot: 5YR 6-10

Eyering Color: 5RP 5/4

Irises: 5Y8-2

Plumage: 10 YR 3-2 heavy grains throughout

Legs: 5RP 5/4

Remarks: Shot near colony P° 10-5, 2-1. Both alulae.

Stomach empty.





# Catalog

172658

386

*Larus glaucescens* x *occidentalis*

Spec r  
LW

Location: Gull Rock, near Flattop Island, San Juan Co., Wash.

Date: July 29, 1988

Sex: ♀ 1 ova > 3mm, rest less than 1mm

Weight: 995 g

Fat: poor

Wingl. ~~left~~ <sup>right</sup>: 39.8

Span: 139.0 cm

Pr. length 10 28.0

7 27.5

9 28.9

6 molted

8 28.6

5 molted

Tail length: 16.2

Tarsus: right 6.01 Toes in 4.66 mid: 5.77 out: 5.68

Hal: 0.51

Head length: 11.95

Bill length: 5.51

post  
nares: 3.41

Bill width: 1.28

Gape: 2.97

Bill depth Gonyx: 1.99 ant  
nares: 1.92 post  
nares: 1.80

Brood patches: 3 refeathering

Bill color Uln: 5Y7/8 Lm: 5Y7/8 Spot: color 14

Irides: 5Y8/3

Pigment: 10YR 3/2 ~~to~~ light grains throughout

Eye ring: 5RP 5/6 - lower + upper; 5Y 8/6 lower

Legs 5RP 6/4

Remarks:

Stomach empty, P° 10-7, 4-1; both ovaries.





# Catalog

172659

387

Larus glaucescens

Location: Bull Rock near Flattop Island, San Juan Co., Wash.

Date: July 9, 1988

Sex: ♂ left testis: 0.75 x 0.53 x 0.50 cm

Weight 1175 g

Fat: ~~good~~ moderate

Wing length right: 42.5

Span 145 cm

Pr. length 10 29.7

7 28.7

9 30.2

6 27.0

8 29.7

5 25.2

Tail length: 17.0

Tarsus right: 6.89 Toes in: 4.58 mid 6.04 out 5.92

Head length: 13.18

Hal 0.62

Bill length: 6.24

post nares: 3.86

Bill width: 1.20

Gape: 3.31

Bill depth Gonys: 2.13

ant nares: 2.04

post nares: 1.88

Brood patches: 3

Bill color um: 5Y7/10 lm: 5Y7/10 Spot: color 14

Eye ring color 5 RP 5/6

Irides: 5Y8/2

Pigment: 10YR 3/1 light grains lower 2/3

Legs: 5RP 5/4

Remarks: Stomach empty. Both alulae

P° 10 -





# Catalog

172660

388

*Larus glaucescens*

Location: Gull Rock near Flattop Isl., San Juan Co., Wash.

Date: July 7, 1988

Sex: ♀ 14 ova > 3mm

Weight: 1020g

Fat: Good

Wing length right 41.2

Span 137.0

Pr. length 10: 28.2

7: broken 26.7

9: 28.7

6: 24.8

8: 28.1

5: 25.0

Tail length: 15.6

Tarsus right: 5.88 Toes in: 4.32 mid: 5.61 out 5.33

Head length: 12.29

Hal 0.50

Bill length: 5.69

post nares: 3.59

Bill width: 1.07

Gape: 2.29

Bill depth Gonys: 2.00

ant nares: 1.89 post nares: 1.73

Brood patches: 3

Bill color um: 5Y7/10 lm: 5Y7/10 Spot: color 14

Eyering color SRP 5/6

Irides: 5Y8/3

Pigment: 10YR2/2 sparse thick grains throughout

Legs SRP 5/4

Remarks: Stomach empty with

small glass pieces; P° 10-5, 2-1; both alulars

72



# Catalog

172735

389

*Larus glaucescens* <sup>x occidentalis</sup> → h

shel +  
rw

Location: Baeria Rocks, Barkley Sound, Vancouver Island, B.C.

Date: July 13, 1988 Canada

Sex: ♀ 11 mm > 0.20 cm

Weight: 1060g Fat: Poor

Wing length (R): 41.1 cm Span: 139.5 cm

Pr. length 10: 28.8 7: 27.4

9: 29.0 6: 26.0

8: 29.2 5: molted

Tail length: 16.5 cm

Tarsus (R) 6.16 Toes in: 4.38 mid 5.67 out: 5.35

Head length: 12.22

Hal: 0.48

Bill length: 5.75 post nares 3.63

Bill width 1.16 Gape: 3.03

Bill depth Goups: 1.96 ant nares 1.91 post nares 1.79

Brood patches 3

Bill color uni = 2.5Y 7/10 uni = 2.5Y 7/10 spot = color 14

Eye ring color 5RP 7/4

Irides 5Y 8/2

Pigment 10YR 3/2 heavy grains lower 2/3.

Legs 5RP 6/4

Remarks: Shot near colony. P° 10-5; 4-2; both alulae. Fish meal in stomach - saved. Intestines saved



Q



U

172637

Doug Bell

Catalog

390

*Larus glaucescens*Shot +  
LW

Location: Baeria Rocks, Barkley Sound, Vancouver Island, B.C.

Date: July 13, 1988 Canada

Sex ♂ LT: 0.98 x 0.56 x 0.51 RT: 0.64 x 0.47 x 0.40

Weight 1190 Fat Moderate

Wing length 41.4 Span: 145.5 cm

Pr length 10 29.1 7: 28.3

9 30.0 6: 27.0

8 29.7 5: 25.7

Tail length: 16.6

Tarsus 6.11 Toes in 4.61 mid 5.98 out: 5.82

Head length: 12.90 Hal: 0.65

Bill length: 5.72 post nares: 3.69

Bill width: 1.23 Gape: 2.87

Bill depth Goups 2.24 ant nares: 2.20 post nares 2.04

Brood patches: 3

Bill color uni: 25Y7/12 lm: 25Y7/12 spot: col. 14

Eyering color 5RP 6/4

Irides: 5Y 8/3

Pigment: 10YR 2/2 thick grains lower 2/3s.

Legs 5RP 6/4

Remarks shot near colony. P<sup>o</sup> 10-5; 2-1; both alulae. Mussels + small fish vertebrae in stomach.





Doug Bell

Catalog

172638

391

*Larus glaucescens*

Shel.

Location: Baeria Rocks, Barkley Sound, Vancouver Island, B.C.

<sup>+</sup>  
R W

Date: July 13, 1988 Canada

Sex ♂ LT 1.40 x 1.07 x 0.78 RT, 1.04 x 0.74 x 0.58

Weight: 1320g

Fat: Moderate

Wing length <sup>Ⓢ</sup>R: 42.8cm

Span: 145.0cm

Pr. length: 10 29.5

7 28.6

9 29.5 30.4

6 27.4

8 29.9

5 molted

Tail length 17.0

Tarsus <sup>Ⓢ</sup>R 5.97 Toes in: 4.44 mid 5.90 out 5.65

Head length: 13.27

Hal 0.58

Bill length 6.01

post nares 3.75

Bill width 1.31

gape 3.31

Bill depth Goups: 2.12

ant nares 2.06 post nares 1.88

Brood patches 3

Bill color um: 5Y8/8 lm: 5Y8/8 spot: col. 14

Eye iris color 5RP 5/4

Irides: 5Y 8/2

Pigment: 10YR 2/1 heavy throughout

Legs 5RP 5/4

Remarks: Shot near colony. P° 10-6, 3-1; Both alulae.  
stomach w/ fish meal. Segments worms intestine -  
saved.





# Catalog

172639

392

*Larus glaucescens*

Skel +  
RW

Location: Baeria Rocks, Barkley Sound, Vancouver Island, B.C.

Date: July 13, 1988 Canada

Sex ♂ LT: 1.08 x 0.87 x 0.65 RT: 0.92 x 0.61 x 0.60

Weight 1300g Fat Moderate.

Wing length  $\overline{L}$  42.7 Span: 147.5

Pr. length 10 30.9 7 29.7

9 31.5 6 27.8

8 31.2 5 27.2

Tail length: 17.0

Tarsus  $\overline{L}$  6.40 Tarsus 4.56 mid 6.09 out: 5.87

Head length: 13.27 Hae: 0.50

Bill length: 6.20 post nares: 3.85

Bill width: 1.36 gape: 3.31

Bill depth Gony: 2.35 ant nares: 2.28 post nares: 2.27

Brood patches: 3

Bill color um: 2.5Y 7/12 lm: 2.5Y 7/12 spot: 4/13

Eye ring color 5RP 6/4

Irides: 5Y 8/3

Pigment: 10YR 2/2 heavy flecks throughout

Legs 5RP 6/4

Remarks: Not near colony. Both alulae. P° 10-5, 3-1.

Stomach full w/ big fish - saved.



g

# Catalog

172640

393

Larus Glaucescens

Shel +

RW

Location: Baeria Rocks, <sup>Barkley</sup> ~~Barkley~~ Sound, Vancouver Island, B.C.

Date: July 13, 1988

Canada

Sex: ♀ 8 ova 0.35 cm l.

Weight: 1010g

Fat Moderate

Wing length <sup>(2)</sup> R 40.4 cm

Span: 140.0

Pr. length 10 28.6

7: 27.6

9 29.4

6: 25.3

8 28.9

5: 24.1

Tail length: 15.9 cm

Tarsus <sup>(R)</sup> 6.08 Toes in: 4.24 mid: 5.62 out: 5.56

Hal: 0.64

Head length: 12.38

Bill length: 5.62

post nares: 3.71

Bill width: 1.25

Gape: 2.83

Bill depth Gony: 1.95

ant nares: 1.86

post nares: 1.70

Brood patches: 3

Bill color um: 5Y8/6 lm: 5Y8/6 spot: color 14

Eye ring color 5RP 5/4

Irides: 5Y8/3

Pigment 10YR 2/2 patchy flecks throughout

Legs 5RP 6/4

Remarks: Shot near colony. Both alulas 10-4, 2-1.

Stomach w/ fish meal. Heavy regurgitated worm infest - intestine.





# Catalog

172641

394

*Larus glaucescens*

Shel +

LW

Shel + LW

Location : Baeria <sup>Rocks</sup> St., Barkley Id. Vancouver Isl. B.C.

Date : July 14, 1988

Canada

Sex ♀ 5 ova > 0.45 cm, 10 ova > 0.10 cm

Weight : 1090g

Fat : Mod.

Wing length (R) 40.5

Span 138.5 cm

Pr. length 10 27.8

7 27.5

9 28.7

6 25.8

8 28.6

5 23.8

Tail length 15.8

Tarsus (R) 6.10 Toes in 4.37 mid 5.82 out 5.47

Head length : 12.39

Hal 0.45

Bill length : 5.73

post nares : 3.65

Bill width : 1.26

Gape : 2.99

Bill depth Gonys : 1.86

ant nares : 1.73

post nares : 1.64

Brood patches : 3

Bill color LM : 2.5Y 7/10 LM : 2.5Y 7/10 Spot : color 14

Eyering color 5RP 6/4

Irides 5Y 8/2

Pigment 10YR 23/2 light sparse grains throughout

Legs 5RP 6/4

Remarks Shot P° 10-4, 1; Stomach w/ small shells, tumor in stomach wall - saved. Both alulae





# catalog

172645

395

Glauc Larus glaucescens

Location Baeria <sup>Rocks</sup> Isl. Barkley Sound Vancouver Isl. B.C.

Date July 14, 1988 Canada

Sex ♀ 3ova = 0.20 mm φ.

Weight 1015g

Fat: Good

Wing length (C) 40.0

Span 138.0

Pr. length 6 27.7

4 26.9

9 28.0

6 25.7

8 28.2

5 molted

Tail length 15.9

Tarsus (C) 5.70 Toes in: 3.88 mid: 5.36 out: 5.01

Head length 12.32

Hal: 0.56

Bill length 5.77

post nares: 3.73

Bill width 1.31

Gape: 2.99

Bill depth Gouys: 2.00 ant nares: 2.00 post nares 1.73

Brood patches: 3 refeathering

Bill color LM: 5Y8/6 LM: 5Y8/8 Spot: col. 15

Eye ring color 5RP 6/4

Irides 10YR 8/2

Pigment 10YR 2/1 thick throughout

Legs 5RP 7/4

Remarks Shot. P° 10-6, 3-1; Two fish vertebrae

& 1 small shell in stomach - saved. Both alulae





# Catalog

172643

396

*Larus glaucescens*

Location: <sup>Rab</sup> Baeria Ist. Barkley Id. Vancouver Isd.

Date: July 14, 1988

B.C., Canada

Sex ♂ LT: 1.72 X 1.31 X 1.32 RT: 1.22 X 0.98 X 0.85

Weight 1290g

Fast Good.

Wing length  $\frac{L}{R}$  41.4

Span: 143.0cm

Pr. length 10 28.6

7 28.1

9 29.5

6 26.8

8 29.3

5 26.0

Tail length 16.9

Tarsus  $\frac{L}{R}$  6.48 Toes in 4.59 mid 5.88 bit 5.72

Head length: 13.15

Hal. 0.62

Bill length 6.02

post nares: 3.83

Bill width 1.23

gape: 3.07

Bill depth Gony's 2.22 ant nares 2.17 post nares 1.98

Broad patches 3

Bill color Um: 2.5Y 7/10 lm: 2.5Y 7/10 spot col 14

eyering color 5RP 6/4

Irides 5Y 8/4

Pigment 10YR 2/1 graining throughout

Legs 5RP 5/4

Remarks shot. P° 10-5, 3-1. Stomach empty. Both alulas

2



# Catalog

172644

397

*Larus glaucescens*

Location : Baeria <sup>Rocks</sup> Ist. Barkley Id. Vancouver Isl. B.C.

Date : July 14, 1988 Canada

Sex ♂ LT: 0.97 x 0.83 x 0.73 ET: 0.85 x 0.72 x 0.58

Weight: 1345g

Fat Good

Wing length (R) 44.6

Span 151.0 cm

Pr. length 10 30.6

7 29.5

9 31.4

6 28.3

8 30.5

5 molted

Tail length: 17.5 cm

Tarsus (R) 6.52 toes in 4.90 mid 6.53 out: 6.26

Head length: 13.43

Hal: 0.50

Bill length: 5.99

post nares: 3.84

Bill width: 1.33

Gape: 3.36

Bill depth Gouys: 2.24 ant nares: 2.12 post nares: 1.70

Brood patches: 3

Bill color um 2.5Y 7/10 lm 2.5Y 7/10 Spot: color 14

eyering color SRP 6/4

Irides 5Y 8/2

Pigment 10YR 2/1 thick throughout

Legs SRP 6/4

Remarks shot. P. 10-6, 3-1, Empty stomach.

Both alulae





# Catalog

172645

398

*Larus glaucescens*

Shel +  
LW

Location : Baeria <sup>Rocks</sup> Isl., Barkley Id. Vancouver Isl. B.C.  
Canada

Date : July 14, 1988

Sex ~~♂~~ ♀ 3 ova > 0.20 cm.

Weight 1275g Fat: Mod.

Wing length (R) 41.3 span : 140.0 cm

Pr. length 10 28.6 7 27.7

9 29.5 6 26.1

8 29.0 5 26.0

Tail length: 16.5

Tarsus (R) 5.92 Toes in: 4.42 mid: 5.86 out: 5.40

Head length 12.16 Hal: 0.62

Bill length: 5.71 Post nares: 3.36

Bill width: 1.20 Gape: 1.46

Bill depth Gonys: 1.96 ant nares 1.88 Post nares 1.78

Brood patches: 3

Bill color um: 5Y8/8 lm: 2.5Y7/10 spot: color 14

Eyering color 5RP 5/4

Irises 5Y8/2

Pigment 10YR 2/2 grainy thought outer perimeter

Legs 5RP 6/4

Remarks Shd. P° 10-5, 2-1. Stomach full w/ small fish Pin worms in intestines. Both alabs





28

399

*Larus glaucescens*Shl +  
LWLocation Cleland Island near Totino, ~~Clayoquot~~<sup>Clayoquot</sup> Sound,

Date 15 July 1988

Vancouver Island, B.C.  
Canada

Sex ♂ TSNE

Weight 1,600 gms

Fat Moderate

Wing length  $\frac{L}{R}$  41.8

Span 146 cm

Pr. length 10 29.5

7 28.4

9 30.1

6 26.5

8 30.0

5 25.4

Tail length : 16.5

Tarsus  $\frac{L}{R}$  6.71 Toes in: 4.75 mid: 6.32 out: 6.12

Head length: 13.84

Hal: 6.40

Bill length: 6.59

post nares: 4.07

Bill width: 1.27

Gape: 3.25

Bill depth Gonyx: 2.20 ant nares: 2.12 post nares: 1.97

Brood patches Refeathering - 3

Bill color um: 25Y7/10 lm: 25Y7/10 Spot: Color 14

Eyering color SRP 5/4 lower: 5Y 8/4

Iridis: 5Y 8/3

Pigment: 10YR 2/2 light grains throughout  
heavy lower  $\frac{1}{2}$ 

Legs SRP 5/4

Remarks: P 10-5 2-1 354 molted





172629

## Catalog

400

*Larus glaucescens* x *occidentalis*Location Cleland Island near Totino, <sup>Clayoquot</sup> ~~Clayoquot~~ Sand,  
Date July 15, 1988 Vancouver Island, B.C.  
Canada

Sex ♂ TSNE

Weight 1,300 gms

Fat

Wing length (R) 41.8 cm

Span 142.0 cm

Pr. length 10 28.7

7 28.0

9 29.4

6 26.5

8 29.0

5 25.6

Tail length 15.7

Tarsus (R) 6.32 Tars in: 4.82 mid: 6.14 ext: 5.93

Head length: 13.51

Hcl: 0.48

Bill length: 6.23

post  
nares: 3.82

Bill width: 1.20

Gape: 3.22

Bill depth Gonyx: 2.30

ant  
nares: 2.22 post  
nares: 2.04

Brood patches 3

Bill color um: 2.5Y7/10 lm: 2.5Y7/10 Spot: color 15

Eyering color SRP 5/4

Irides: 10YR 8/2

Pigment: 10YR 2/1 thick throughout

Legs SRP 5/4

Remarks



# Catalog

172630

401

*Larus glaucescens*

Location: Cleland Isl. near Tofino, <sup>Clayoquot</sup> Clayoquot Sound,

Date: July 15, 1988

Vancouver Id., B.C.  
Canada

Sex ♂ TSNE

Weight 1,340 gm Fat Moderate

Wing length (R) 43.1 Span 145 cm

Pr. length 10 29.7 7 29.0

9 30.3 6 29.2

8 30.1 5 25.4

Tail length: 16.5

Tarsus (R) 6.23 Tars in: 4.43 mid: 5.73 out: 5.49

Head length: 13.29 Hal: 0.63

Bill length: 6.10 Post nares: 3.64

Bill width 1.12 Gape 3.08

Bill depth Gonys: 2.26 ant nares: 2.18 post nares: 1.93

Brood patches 3

Bill color um: 2.5YR 10/10 m: 2.5YR 10/10 Spot: color 14

eyering color: 5RP 5/4 lower eyering: 5YR 8/3

Irides: ~~SRP~~ 10YR 8/2

Pigment: 10YR 2/2 graying throughout

Legs: 5RP 5/4

Remarks:





Lg/h

## Catalog

172734

402

*Larus glaucescens x occidentalis*Shel<sup>r</sup>  
RW

Location Cleland Id. near Tofino, Clayoquot Sound, Vancouver Id.,

B.C.

Canada

Date 15 July 1988

Sex ♂ TSNE

Weight: 1,425 gms

Fat: Good

Wing length:  $\textcircled{R}$  43.5

Span 146

Pr. length 10 30.0

4 29.0

9 30.7

6 27.1

8 30.2

5 molted

Tail length: 17.0

Tarsus  $\textcircled{R}$  6.44 toes in: 4.74 mid: 6.10 out: 5.85

Head length: 13.94

Heel: 0.62

Bill length: 6.44

port  
nores: 3.93

Bill width: 1.35

Gape: 3.37

Bill depth Gonys: 2.19

ant  
nars: 2.09 port  
nars: 2.00

Brood patches 3

Bill color um: 5Y8/8 lm: 5Y8/8 spot: color 14

Eye ring color: 5RP 6/4

Irides: 10YR 8/2

Pigment: 10YR 2/2 thick lower 2/3

Legs: 5RP 6/4

Remarks:





403

Larus glaucescens

Vancouver Is.

Location: Cleland Island near Totino, Clayoquot So. B.C.,

Date 15 July 1988

Canada

Sex ♀ OSNE

Weight ~~950~~ <sup>950</sup> ~~950~~ gm

Fat Moderate

Wing length (R) 40.4

Span 140.5

Pr. length 10 28.2

4 26.5

9 28.7

6 25.6

8 28.4

5 molted

Tail length: 16.0

Tarsus (R) 5.94 Tars in: 4.53 mid: 5.65 but: 5.45

Head length: 12.33

Hail: 0.49

Bill length: 5.75

Post nares: 3.56

Bill width: ~~1.02~~ 1.02

Gape: 2.25

Bill depth Gonys: 1.95

Ant nares: 1.92

Post nares: 1.76

Brood patches 3

Bill color um: 2.5Y7/10 lmi: 2.5Y7/10 Spot: color 14

Eyering color: 5RP 6/4

Irides: 5Y8/2

Pigment: 10YR 2/2 light grays throughout

Legs: 5RP 6/4

Remarks



172623

## Catalog

Lg

404

*Larus glaucescens*

Shel +

Location : Teo Rocks near Nanoose Bay, Vancouver Isl.

RW

Date : July 17, 1986

B.C.

Canada

Sex ♀ 4ova &gt; 0.35 cm ; 3ova &gt; 0.20 cm

Weight <sup>1040</sup> ~~1040~~ gms

Fat Moderate

Winglength  $\bar{x}$   $\pm$  40.5Span <sup>137 cm</sup> ~~137~~ cm

Pr. length 10

28.8

7

27.5

9

29.4

6

25.5

8

29.1

5

molted

Tail length

16.0 cm

Tarsus

5.76

Toes in: 4.19 mid: 5.58 out: 5.08

Head length

12.14

Hail: 0.57

Bill length 5.70

Post nares 3.48

Bill width 1.20

Gape 2.78

Bill depth

Gomys: 1.88

ant nares: 1.79 post nares: 1.68

Brood patches

3 refeathering

Bill color um:

5Y8/6

lm: 5Y8/6

Spot: color 14

Eyering color

5RP 6/2

Irides

5Y8/3

Pigment

10YR2/2 fine grails lower 1/2

Legs

5RP 5/4

Remarks: Shot.

Starfish arm (purple) in stomach.

p° 10-6, 3-1;





# Catalog

172624

405

*Larus glaucescens* x *occidentalis*

Skel. +

Location . Teo Lakes near Nanoose Bay, Vancouver Isl.

RW

Date July 17, 1988

B.C.  
Canada

Sex ♀       $\text{S}_{\text{max}} > 0.20 \text{ cm.}$

Weight: 960g      Fat: Moderate

Wing length (D) ~~41.0~~ 41.0 span 136.5 cm

Pr. length 10 28.5      4 26.8

9 29.2      6 molted

8 28.3      5 molted

Tail length: 15.0

Tarsus (D) 5.94      toes in: 423 mid: 5.50 out: 5.25

Head length: 11.91      Hal: 0.50

Bill length: 5.46      Post: 3.33

Bill width: 1.12      Gape: 2.99

Bill depth Goups: 2.03      ant: 1.97      Post: 1.82

Brood patches: 3 refeathering

Bill color um: 2.5Y7/12      Lm: 2.5Y7/12      Spot: color 14

Eyering color: 5RP 6/2      10YR 7/6      lower

Irides: 10YR 8/2

Pigment: 10YR 3/2 light graining throughout  
greater and lower 1/2

Legs: 5RP 5/4

Remarks: Shot. Stomach 1/2 seaweed & starfish  
remains.





# Catalog

172625

406

*Larus glaucescens*

Location : Ye Rocks near Nanoose Bay, Vancouver Isl.

Date : July 17, 1988

B.C.  
Canada

Sex : ~~XXXXXX~~ ♂ LT: 1.25 x 0.84 x 0.66 RT:

Weight 1220g Fat Mod.

Wing length (R) 42.9 Span 145.0 cm

Pr. length 10 29.5 7 29.2

9 30.6 6 28.0

8 30.5 5 molted

Tail length 17.0

Tarsus (R) 63.2 Toes in 4.45 mid 5.98 out 5.59

Head length : 13.36

Hal: 0.60

Bill length 6.06 post nares: 3.70

Bill width 1.35 Gape: 3.12

Bill depth (Goups) 2.13 ant nares 2.03 post nares 2.01

Brood patches: refeathered.

Bill color um: 2.5Y 7/10 lm: 2.5Y 7/10 Spot color 14

Eye color 5R 6/2

Irides 10YR 8/2

Pigment 10YR 3/1 grainy lower 2/3

Legs 5R 5/2

Remarks: Hot. Starfish remains in stomach.





# Catalog

172626

407

*Larus glaucescens*

hd + pw

Location: Ye0 Rocks near Nahoose Bay, Vancouver Isl.

Date: July 17, 1988

B.C.  
Canada

Sex: ♀ 97595

Weight ♀ Ovary minute

Fat Poor

Wing length 41.0 cm Span 137.5 cm

Pr. length 10: 28.9 7: 27.4

9: 29.5 6: molted

8: 29.0 5: "

Tail length: 15.8

Tarsus 5.76 Toes in: 4.42 mid: 5.59 out: 5.53

Head length: 11.88 Hal: 0.65

Bill length: 5.37 post nares: 3.31

Bill width: 1.19 Gape 3.05

Bill depth Gonys 1.94 ant nares 1.83 post nares 1.25

Brood patches: refeathered brood patches

Bill color um: 547/8 lm: 547/8 spot: col. 14

Eye ring color 5R P 6/2

Irides

X destroyed

Pigment

Legs

Remarks: brown patches on all tail feathers also brown mottling on breast. Stomach w/ small fish vertebrae. Heavy intest. worm (regurgitated) infestation).





# Catalog

172627

408

*Larus glaucescens x occidentalis*

Location : Yeo Rocks near Nahoose Bay, Vancouver Isl.

Date July 17, 1988

B.C.  
Canada

Sex ♀ Hova > 0.35 mm.

Weight 900g Fat Moderate

Wing length (R) 39.2 Span 131.0 cm

Pr. length 10 27.0 7 26.1

9 27.6 6 ~~25.7~~ 25.7

8 27.1 5 molted

Tail length 15.0

Tarsus (R) 5.68 Toes in 4.25 mid 5.44 out 5.15

Head length : 11.78 Hal 0.32

Bill length : 5.47 post nares : 3.38

Bill width : 1.11 Gape : 2.96

Bill depth Gonys : 1.83 ant nares 1.74 post nares 1.73

Brood patches : 3 refeathered

Bill color um : 10YR 7/10 lm : 10YR 7/10 Spot : color 14

Eyering color 5RP 6/4 Lower 5Y 7/4

Irides 10YR 8/2

Pigment 10YR 2/2 Thick flecks lower 1/2

Legs 5RP 6/4

Remarks : shot. Stomach w/ starfish remains





# Catalog

Lg

172610

409

*Larus glaucus*

UBC Research Farm

Location: Mouth of Oyster River, Vancouver Id., B.C., Canada

Date July 19, 1988

Sex ♀ 2ova > 0.25 cm 2ova > 0.15 cm

Weight 935g Fat: Good

Wing length (R) 40.3 Span 138.5 cm

Pr. length 10 28.2 7 26.5

9 28.6 6 25.0

8 27.0 5 molted

Tail length 15.9

Tarsus (R) 6.29 Toes in 4.36 mid 5.72 out 5.51

Head length 11.89 Hal 0.49

Bill length 5.71 Post nares 3.53

Bill width 1.12 Gape 2.90

Bill depth Gonys 1.99 ant nares 1.85 post nares 1.67

Breod patches: 3 refeathering

Bill color Im 5Y8/6 Wm 5Y8/6 Spot 5YR 6/14

Eyering color 5RP 5/6

Irides 5Y8/6

Pigment 10YR 3/2 light grains throughout

Legs 5RP 6/4

Remarks: shot. P 10-6, 4-1; Stomach empty.

Slight mesenteric worm infestation in mesenteries.





# Catalog

172611

410

*Larus glaucescens*

Location: Mouth of Oyster River, Vancouver Id., B.C., Canada

Date July 19, 1988

Sex 1190g ♂ LT: 0.61 x 0.41 x 0.32 RT: 0.66 x 0.45 x 0.31

Weight 0.7 L Fat Moderate.

Wing length  $\frac{L}{R}$  43.0 Span 144.5 cm

Pr. length 10 29.8 7 28.8

9 30.4 6 27.0

8 30.0 5 25.5

Tail length: 16.8

Tarsus  $\frac{L}{R}$  6.50 Toes in 4.69 mid 6.14 out 5.75

Head length: 13.38 Hal 0.69

Bill length 6.06 postnares 3.79

Bill width 1.37 Gape 3.28

Bill depth Gonys 2.25 ant nares 2.15 port nares 1.96

Broad patches: 3 refeathering

Bill color LM: 5Y8/6 LM: 5Y8/6 spot: color 15

Eyering color 5RP 5/4

Irides 10YR 8/3

Pigment 10YR 2/2 grainy thru throat greater lower 1/2

Legs 5RP 5/4

Remarks: Both alulars +

primaries 10-1, slight worm infestation - segmtd.

worms in <sup>mesenteries</sup> intestines - Stomach w/ remains of shrimp,  
one fish skull.





# Catalog

172851

411

*Colaptes auratus*

Skin  
only

Location Port Hardy, Vancouver Id., B.C., Canada

Date 19 July 1988

Sex ♂ LT+RT 5mm X 2.5mm

Weight 150 gms

Fat No fat

Winglength  $\frac{L}{R}$

Span

Pr. length 10

7

9

6

8

5

Tail length

Tarsus  $\frac{L}{R}$

Toes in

mid

out

Head length

hac

Bill length

post  
nares

Bill width

Gape

Bill depth Gouys

ant  
nares:

post  
nares:

Brood patches

Bill color LM:

LI:

Spot:

Eyering color

Irides

Pigment

Legs

Remarks Found dead on road to Ferry, Port Hardy

B.C

dx



# Catalog

Lg

172539

412

*Larus glaucescens*

1000 I

Shel +

RW

Location : Sloop Islet, Massett Inlet, Graham Island, Queen  
Date : July 25, 1988 Charlotte Islands, B.C.  
Canada

Sex ♂ LT: 0.95 x 0.65 x 0.57 RT: Not found.

Weight : 1210g Fat Poor

Winglength  $\textcircled{L}$  43.5 Span 151.0 cm

Pr. length 10 30.4 7 29.1

9 31.2 6 molted

8 30.9 5 4

Tail length : 16.5

Tarsus  $\textcircled{L}$  6.21 Toes in 4.48 mid 5.97 out 5.57

Head length : 13.10 Hal 0.55

Bill length : 6.11 post nares : 3.92

Bill width : 1.41 Gape : 3.41

Bill depth Goups : 2.14 ant nares : 2.08 post nares : 1.93

Brood patches : 3 refeathering.

Bill color UM: 25Y7/10 LM: 2.5Y 7/10 spot : color 14

Eyering color 5RP 5/4

Irides 10YR 8/2

Pigment 10YR 2/2 graying throughout greater lower  $\frac{2}{3}$

Legs 5RP 5/4

Remarks : Stomach empty except for 9 small rocks.

P<sup>o</sup> 10-7, 5-1. Both alulae

am

So how does  
this

g



Lg

## Catalog

172540

413

*Larus glaucescens*

Isl.

Location: Sloop Islet, Massett Inlet, Graham Island, Queen Charlotte

Shel T  
LW

Date July 25, 1980 Charlotte Islands, B.C., Canada

Sex ♀ 11 mm &gt; 0.24 mm ♂.

Weight: 1020 g Fat Poor

Wing length (R) 41.4 Span 142.0 cm

Pr. length 10 29.1 7 27.8

9 29.6 6 molting

8 28.7 5 "

Tail length 16.6

Tarsus (R) 5.75 Toes in 4.24 mid 5.38 out 5.34

Head length 12.32 tail 0.39

Bill length 5.66 post nares: 3.61

Bill width 1.22 Gape: 2.95

Bill depth Gonyx 1.93 ant nares: 1.87 post nares: 1.76

Brood patches: 3 just refeathering

Bill color UM: 5Y7/10 LM: 5Y7/10 post color 15

Eyering color: 5RP 6/4

Irides: 5Y8/4

Pigment: 10YR 3/2 flecks throughout greater lower  $\frac{2}{3}$ 

Legs 5RP 6/4

Remarks: Stomach w/ meal + worms - saved

P<sup>o</sup> 10-7, 5-1. Both alular.





ANS Lg

# Catalog

McCreight I

172541

414

## Larus glaucescens

Skel +  
RW

Location: McCreight Island, Massett Inlet, Graham Island,  
Date July 25 1988 Queen Charlotte Islands, B.C.  
Canada

Sex ♂ LT: 0.79 x 0.65 x 0.59 RT: 0.65 x 0.55 x 0.41

Weight: 1325g Fat: Poor

Wing length <sup>41</sup> 45.0 Span: 151.5 cm

Pr. length 10 31.4 7 30.1

9 32.0 6 28.7

8 31.6 5 molting

Tail length 18.0

Tarsus ~~6.3~~ <sup>41</sup> 6.3 Toes in 4.42 mid 5.88 out 5.58

Head length: 12.95 Hal 0.51

Bill length 5.75 Post nares: 3.69

Bill width 1.35 Gape: 3.20

Bill depth Goups 2.18 ant nares 2.08 post nares 1.95

Broad patches 3 upper re feathering

Bill color LM: 2.5Y 7/10 LM: 2.5Y 7/10 Spot: color 14

Eye ring color: 5RP 5/4

Irides: not visible

Pigment: 10YR 2/2 complete throughout.

Legs 5RP 6/4

Remarks: left outer toetip missing.

Stomach 1/2 fish meal. Threw up cropfull of small  
fish - sandfish - some saved. Alula RW only. A° 10-6, 4-1.





Lg

## Catalog

Ross  
172542  
415*Larus glaucescens*

Skel r

RW

Location: Ross Island, Massett Inlet, Graham Island, Queen

Date July 25 1988 Charlotte Islands, B.C.  
Canada

Sex ♀ 3 ova &gt; 0.10 cm d

Weight: 1000g Fat Poor

Winglength  $\begin{smallmatrix} \textcircled{L} \\ R \end{smallmatrix}$  41.3 Span: 140.5 cm

Pr. length 10 28.3 7 27.2

9 29.0 6 molting

8 28.6 5 4

Tail length 16.0

Tarsus  $\begin{smallmatrix} \textcircled{L} \\ R \end{smallmatrix}$  5.90 ~~5.90~~ Tars in 4.32 mid 5.69 out 5.51

Head length: 12.09 Hal 0.46

Bill length: 5.63 Post nares 3.55

Bill width: 1.17 Gape 3.03

Bill depth Goups 2.05 and nares 1.88 Post nares 1.70

Brood patches: 3 refeathering

Bill color UM: 5Y8/6 LM: 5Y8/6 Spot: color 15

Eye ring color: 5RP 5/4

Iridides: 10YR 8/2

Pigment: 10YR 4/2 light sparse grains throughout

Legs 5RP 5/4

Remarks: Stomach empty except for nares claws +  
a couple otoliths. Both alulae. P° 10-7, 4-1.





Doug Bell  
1988

Catalog

172543

416

*Larus glaucescens*

Location: Cowley Rocks, Massett Inlet, Graham Island,

Date July 25 1988 Queen Charlotte Islands, B.C.  
Canada

Sex ♂ LT: 0.87 x 0.67 x 0.59 RT: 0.85 x 0.50 x 0.33

Weight 1330g Fat: Good

Wing length  $\frac{L}{R}$  44.0 Span 149.0 cm

Pr. length 10 30.3 7 29.4

9 31.0 6 28.6

8 30.6 5 molted

Tail length: 17.3 cm

Tarsus  $\frac{R}{L}$  6.14 Toes in 4.33 mid 5.98 out: 6.07

Head length 13.20 Hal 0.53

Bill length 6.24 Post nares 3.69

Bill width 1.37 Gape 3.45

Bill depth Goups 2.24 Ant nares 2.07 Post nares 1.93

Broad patches 3 refeathered

Bill color UM: 2.5Y ~~7/10~~ 7/12 spot: color 14

Eyering color: 5RP5/4

Irides: 5Y8/2

Pigment: 10YR 3/2 light grains throughout

Legs: 5RP5/4

Remarks Stomach empty except for 2 otoliths - saved.

Birth alar; A° 10-6, 4-1.





# Catalog

Cowley Rk.

172544

417

*Larus glaucus*

Skel +

LW

Location: Cowley Rocks, Mussett Inlet, Graham Island, Queen

Date July 25 1988 Charlotte Islands, B.C.  
Canada

Sex ♂ LT+RT: 0.50 x 0.30 x 0.25

Weight : 1240 Fat: Good

Wing length  $\text{L}$  43.0 Span : 143.0

Pr. length 10 30.0 7 29.0

9 31.0 6 27.6

8 30.6 5 mottled

Tail length : 17.7

Tarsus  $\text{R}$  5.97 Toes in 4.24 mid 5.67 out 5.21

Head length : 13.26 Hal 0.55

Bill length : 5.97 post nares : 3.89

Bill width : 1.25 Gape : 2.99

Bill depth Gonys : 2.24 post nares : 2.13 post nares : 1.99

Brood patches : 3 refeathering

Bill color LM: 2.5Y7/10 LM: 2.5Y7/10 Spot: color 14

Eyering color: 5 RP 5/4

Irides : 10 YR 8/2

Pigment : 10 YR 2/2 sparse grains throughout

Legs : 5 RP 6/4

Remarks : Stomach full w/ small fish; 1  
mesenteric worm - saved.  $P^o$  10-6, 4-1; both larvae.

Ferry Elephant Bay 5:20-  
5:30



# Catalog

172545

418

*Larus glaucescens*

Shel +  
LW

Location: Cowley Rocks, Massett Inlet, Graham Island,

Date July 25 1980 Queen Charlotte Is., B.C.  
Canada

Sex ♀ 4 ova > 0.10 cm

Weight: 1020g Fat Good

Wing length (L) 42.6 Span: 143.5 cm

Pr. length 10 30.5 7 29.8

9 31.2 6 molted

8 30.7 5 4

Tail length: 17.0

Tarsus (L) 5.97 Tars in 4.12 mid 5.39 but 5.12

Head length: 12.37 Hal 0.57

Bill length: 5.45 post nares: 3.63

Bill width: 1.21 Gape: 3.27

Bill depth Gouys: 1.93 ant nares: 1.86 post nares: 1.69

Brood patches: ~~middle~~ 3 nearly reathered

Bill color um: 2.5Y 7/12 lm: 2.5Y 7/12 spat: color 14

Eye ring color: 5RP 5/4

Irides: 5Y 8/3

Pigment: 10YR 3/3 light flecks throughout

Legs: 5RP 6/4

Remarks Stomach empty. Both alulae. P° 10-7, 5-1.

2

cu



# Catalog

172546

419

*Larus glaucescens*

Skel T

Location: Lowley Rocks, Masset Inlet, Graham Island, Queen

LW

Charlotte Is., B.C., Canada

Date: 26 July 1988

Sex: ♀ 4 ova > 0.50 cm; 4 ova > 0.30 cm

Weight: ~~1180g~~ 980g Fat: Good

Wingl <sup>①</sup> R 41.3 Span: 138.0 cm

Pr Length 10 29.0 7 27.6

9 30.6 6 molted

8 29.4 5 4

Tail Length: 16.3

Tarsus: <sup>①</sup> R 5.87 Toes In. 4.16 Mid. 5.53 Out. 5.36

Head length: 11.88 Hal: 0.60

Bill Length: 5.18 Post Nares: 3.58

Bill Width: 1.04 Gape: 2.90

Bill Depth: Gonys: 1.94 ant Nares: 1.84 Post Nares: 1.62

Brood Patches: 3 not re feathering

Bill Color: UM 5Y 7/10 LM 5Y 7/10 spot 5YR 6/12

Eyering Color: 5RP 6/4

Irides: 5Y 8/2

Plumage: 10YR 7/2 Thick grains throat, sparser upper 1/3

Legs: 5RP 6/4

Remarks: P° 10-7.5-1; Both alulae. Stomach empty except for pin worm. Smells like garbage.





# Catalog

172547

420

*Larus glaucescens*

Location: Cowley Rocks, Masset Inlet, Graham Island,

Date: July 26, 1988

Queen Charlotte Is., B.C., Canada

Sex: ♂, LT: 1.01 x 0.97 x 0.86 RT: 0.92 x 0.67 x 0.67

Weight: ~~1140g~~ 1140g Fat: Moderate

Wingl (R) 43.2 Span: 139.5 cm

Pr. Length 10 30.1 7 29.5

9 30.6 6 molted

8 30.5 5 4

Tail length: 16.8

Tarsus: (R) 6.05 Toe In - 4.02 Mid - 5.69 Out - 5.47

Head length: 12.53 Hal: 0.60

Bill length: 5.76 Post Nare: 3.62

Bill Width: 1.13 Gape: 3.06

Bill Depth Gonys - 2.18 Ant Nares: 2.09 Post Nares: 1.92

Broad Palates: 3

Bill Color: um. 2.5Y 7/12 cm: 2.5Y 7/12 Spot: Lbn 14

Eyering Color: 5RP 5/6

Irides: 5Y 8/13

Pigment: 10YR 2/2 Heavy throat; clear flecks upper.

Legs: 5RP 6/6

Remarks: P° 10-7, 5-1; both alars. Stomach w/ remains of starfish.





# Catalog

172548

421 *Larus glaucescens* ~~(Bare Rocks (Bush Islets))~~ Alliford Islets

Location: near ~~Flaming Islets~~, Alliford Bay, Skidegate Inlet, Moresby Isl.  
Q.C. I's, BC, Canada

Date: 27 July 1988

Sex: ♀ 3ova > 0.20 mm, 4ova > .10 mm

Weight: 990 gms

Fat: mod

Wing  $\textcircled{R}$  41.6

Span: 140.0 cm

Pr Length 10 ~~29.3~~ 29.2 7 27.7

9 ~~broken~~ 30.1 6 molted

8 ~~30.1~~ 29.5 5 "

Tail length: 16.3

Tarsus  $\textcircled{R}$  5.62

Toes In - 4.1

Mid - 5.46 Out - 5.30

Head length: 12.02

Hal 0.50

Bill Length: 5.41

Post Nares: 3.55

Bill Width: 1.26

Gape: 2.84

Bill Depth Gonyx - 1.81

Ant Nares - 1.76

Post Nares - 1.70

Brood Patches: 2 upper, 1 middle refeathering.

Bill color: UM: 5Y 7/10

LM: 5Y 7/10

Spot: Color 14

Irides color: ~~5RP 6/4~~ 5Y 8/2

Eyeing color: 5RP 6/4

Pigment: 10YR 3/2

Thick throat

Legs: 5RP 6/4

Remarks: stomach full of sand fish. Segments worms  
mesenteries

Pr. 10-7, 5-1





# Catalog

172549

422

*Larus glaucescens* (~~Bush Islets~~) Alliford Islets

Location: ~~Flower Islets~~ <sup>near Bare Rocks</sup> Alliford Bay, Skidegate Inlet, Moresby I.,

Date: 27 July 1988 Queen Charlotte Islands, B.C., Canada

Sex: ♂ LT: 0.80 x 0.35 x 0.33 RT: 0.64 x 0.48 x 0.40.

Weight: 1,275 gms Fat: Moderate.

Wingl. (R) 44.1 Span: 146.5 cm

Pr. Length 10 - 30.5 7 - 28.7

9 - 30.9 6 - 27.2

8 - 30.1 5 - 25.2

Tail Length: 16.5

Tarsus: (L) R 6.59 Toes In - 4.69 Mid - 6.18 Out - 5.99

Headlength: 13.09 Hal: 0.46

Bill Length: 5.84 Post Nares: 3.67

Bill Width: 1.33 Gape: 3.33

Bill Depth - Gape: 2.27 Ant Nares: 2.20 Post Nares: 2.01

Brood Patches: 3

Bill Color UM: 2.5Y 7/10 LM: 2.5Y 7/10 Spot: Color 14

Eyering Color: SRP 6/6

Irides: ~~SR~~ 10YR 8/2

Pigment: 10YR 7/2. Even grains throughout, > lower 2/3.

Legs: SRD 6/4

Remarks: Stomach full w/ fish meal.

Pr. 10 - 5, 3 - 1





# Catalog

172550

423

*Larus glaucescens*

~~near Bare Rocks (Bush Islets)~~

Alliford Islets

Location ~~Flowery Islets~~, Alliford Bay, Skidegate Inlet, Moresby Island,

Queen Charlotte Islands, B.C., Canada

Date: July 27, 1988

Sex: ♂ LT: 1.01 x 0.57 x 0.52 RT: 0.78 x 0.41 x 0.42

Weight: 1,265 gms.

Fat: Moderate

Wing: <sup>(L)</sup> 42.9 cm

Span 144.0 cm

Pr. Length 10 29.9

7 28.5

9 30.6

6 molting

8 30.5

5 "

Tail length: 17.2

Tarsus: <sup>(L)</sup> 6.21

Toes In 9.37

Mid 5.77

Out 5.58

Head length: 13.29

Hal 0.51

Bill Length: 6.10

Post Nares: 3.96

Bill Width: 1.27

Gape: 3.43

Bill Depth: Gonyx- 2.14

ant Nares: 1.99

Post Nares: 1.89

Brood Patches: 3 refeathered.

Bill Color: UM: 2.5 Y 7/10 LM: 2.5 Y 7/10 Spot. Color 15

Eyering Color: SRP 5/4

Irides: 10 Y R 8/2

Plumage: 10 Y R 2/2 Thick grain throughout, > lower 2/3

Legs: SRP 6/4

Remarks: Stomach empty except for few fish vertebrae

(small) rocks + otoliths. Segments worms mesenteries.

Pr. 10-7 5-1





# Catalog

172551

424

*Larus glaucaus*

Location: ~~near Base Rocks (Bark Islets)~~ Alliford Islets  
~~Flower Islets~~, Alliford Bay, Skidegate Inlet, ~~South~~  
 Moresby Island, Queen Charlotte Islands, B.C.  
 Canada

Date: 27 July 1988

Sex: ♂ LT: 0.65 x 0.58 x 0.41 RT: 0.43 x 0.39 x 0.25

Weight: 1400g

Fat: Mod.

Wingl (R) 43.5

Span: 147.8 cm

P Length 10 30.2

7 28.8

9 30.8

6 molting

8 30.5

5 24.5

Tail Length: 17.3

Tarsus (R) 6.07 Toes In - 4.53 Mid 6.09 Out 5.68

Hal 0.48

Head Length: 13.34

Bill Length: 6.04

Post Nares: 3.92

Bill Width: 1.27

Gape: 3.40

Bill Depth Gonyx: 2.10

Ant Nares: 1.94 Post Nares: 1.84

Brood Patches: 3 refeathering

Bill Color: UM: 2.5Y 7/10 LM: 2.5Y 7/10 Spot. Color 15

Eyering Color: 5RP 8/6

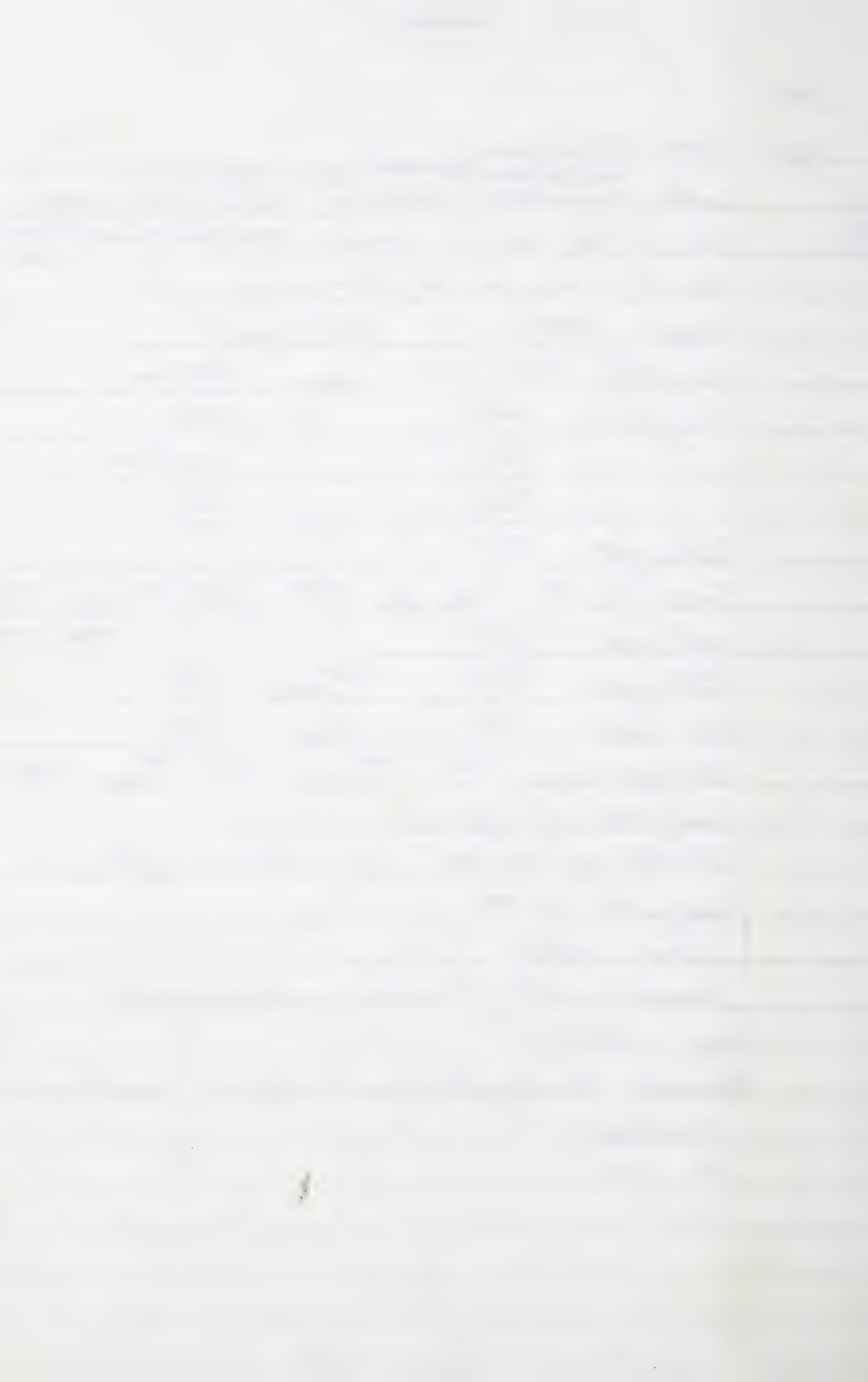
Iris: 10YR 8/2

Pygment: 10YR 2/1. Thick grains spaced throughout.

Legs: 5RP 8/4

Remarks: Stomach full of small sand fish. Segments worms  
 mesenteries

Pr 1-10





# Catalog

1+2552

425

*Larus glaucescens*

near Bare Rocks (Bush Islets) = Bush Islands

Location: ~~Flowery Islets~~, Alliford Bay, Skidegate Inlet, Moresby Island,

Date: 27 July 1988

Queen Charlotte Islands, B.C., Canada

Sex: ♀ 8 ova > 0.10 cm

Weight: 1,080 gms

Fat: Moderate

Wing <sup>(L)</sup> 42.0 cm

Span: 143.0 cm

Pt Length 10 29.8 cm

7 28.3

9 broken

6 molting

8 29.7

5

4

Tail length: 16.5 cm

Tarsus <sup>(R)</sup> 5.96 Toe dn 4.37 Mid 5.73 Ext. 5.52

Head length: 12.19

Heel 0.50

Bill Length: 5.22

Post Nares: 3.47

Bill Width: 1.23

Gape: 3.16

Bill Depth Comps - 2.04

Ant Nares - 1.94 Post Nares - 1.77

Brood Patches: 3 refeathering.

Eyering color - 5RP 5/4

Under color - 10YR 8/2

Pigment: 10YR 7/2 - Even grains throat > lower 2/3

Bill color LM: 2.5Y 7/10 LM: 2.5Y 7/10 Spot: color 14

Leg color: 5RP 6/4

Remarks: Stomach 7/10 fish meal.

Pr. 10-7 to 5-1





# Catalog

172553

426

*Larus glaucus*

Bare Rocks (Bush Islets) = Bush Islands

Location: near ~~Flowerly~~ Islets, allford Bay, Skidegate Inlet, ~~San~~ Moresby

Date: 27 July 1988

Island, Queen Charlotte Islands, B.C.  
Canada

Sex: ♀ 3 ova > 0.15 cm

Weight: 1.080 gms

Fat: moderate.

Wing: <sup>①</sup>R 39.3

Span: 135.5 cm

Pr length 10: 27.4

7 25.4

9: 28.0

6 molting

8: 27.3

5 "

Tail length: 14.8 cm

Tarsus <sup>①</sup>R 5.69

Toes In 4.26 M.d. 5.66 Out. 5.68

~~Beak~~ Head length: 12.34

Hal. 0.42

Bill length: 5.67

Post Nares: 3.55

Bill Width: 1.30

Cope: 2.91

Bill Depth Gonyx: 2.00

Ant Nares: 1.90

Post Nares: 1.75

Brood Patches: none

Bill Color UM: 2.5Y 7/10

LM: 5Y 7/10

Spot: Color 14

Eyering Color: 5RP 6/4

Irides: 10YR 8/2

Pigment: 10YR 3/2. Even <sup>spaced</sup> grains throat, but sparser



Legs: 5RP 6/4

Remarks: Sub-adult - all rectrices w/ gray, P° brownish.

Stomach w/ few rocks, shells.

Pr. 10-7 5-1





# Catalog

172554

*Larus glaucescens*

(Bush Islets) = Bush Islands

427

Location: near Bare Rocks, Alliford Bay, Skidegate Inlet, Moresby Id.,

Date: 29 July 1988

Queen Charlotte Is., B.C., Canada

Sex: ~~♀~~ ♂ LT: 1.07 x 0.55 x 0.51 RT: 0.92 x 0.43 x 0.45

Weight: 1050g

Fat: Mod.

Wingl. (R) 43.0

Span: 142.0 cm

Pr Length 10 29.9

7 29.3

9 31.0

6 moltinf

8 31.0

5 "

Tail length 17.0

Tarsus ~~10~~ 5.99 Toes in 4.32 mid 5.62 out 5.65

Head length 12.63

Hal 0.43

Bill length 5.90

post nares 3.71

Bill width 1.13

Gape 2.62

Bill depth Gouys 2.04 aut nares 1.97 post nares 1.78

Brood patches 3 refeathering.

Bill color UM: 2.5Y 7/10 LM: 2.5Y 4/10 spot color 14

Eye ring color: 5RP 6/4 Lower: 5Y 7/6

Irides : 10YR 8/3

Pigment : 10YR 2/1 thick band lower 2/3

Legs : 5RP 7/4

Remarks : Pr. 10-6, 4-1

20



172555

428

*Larus glaucescens*Location near Bare Rocks (Bush Islets), Alliford Bay, Skidegate Inlet,  
Moresby Island, Queen Charlotte Islands, B.C.,  
Canada

Date July 29, 1980

Sex ♀ Sova &gt; 0.25 cm, 2 ova &gt; 0.20

Weight 1000g Fat: mod.

Wing length <sup>①</sup> R 39.2 Span 134.0 cm

Pr. length 10 28.0 7 27.3

9 28.5 6 molting

8 28.0 5 "

Tail length 15.9

Tarsus <sup>①</sup> R 5.72 Toes in 3.96 mid 5.35 out 5.17

Head length 12.04 Hal 0.56

Bill length 5.43 post nares 3.47

Bill width 1.07 Gape 2.95

Bill depth Gape 1.94 ant nares 1.88 post nares 1.73

Brood patches 3 refeathered.

Bill color UM: 5Y7/10 LM: 5Y7/10 spot: color 15

Eyering color: 5RP 6/4

Irides : 10 YR 8/2

Pigment : 10 YR 3/2 thick band lower 1/2

Legs : 5R P 6/4

Remarks : Small fish remains in stomach.

Pin marks - throat.





# Catalog

172556

429

*Larus glaucescens*

Location: <sup>near Bare Rocks (Bush Islets), Alliford Bay, Skidegate Inlet,</sup> moresby Island, Queen Charlotte Islands, B.C., Canada

Date July 29, 1988

Sex ♀ 6 ova > 0.24 mm

Weight 900g Fat Moderate

Wing length  $\bar{R}$  40.5 Span 134.0 cm

Pr. length 10 28.4 7 27.8

9 29.3 6 molting

8 28.9 5 4

Tail length 15.8

Tarsus  $\bar{R}$  5.69 Toes in 3.95 mid 5.20 out 5.00

Head length 11.57 Hal 0.39

Bill length 5.03 post nares 3.20

Bill width 1.06 Gape 2.55

Bill depth Gonys 1.72 ant nares 1.65 post nares 1.56

Brood patches 3 refeathering

Bill color UM: 2.5Y7/10 LM: 2.5Y7/10 spot: color 14

Eyering color: 5RP 4/4

Irides : 10YR 8/2

Pigment : 10YR 2/2 graying throughout greater

Leg : 5RP 5/4 and lower 1/2

Remarks Starfish remains in stomach.





# Catalog

172557

430

Larus glaucescens

Location near Bare Rocks (Bush Islets), Alliford Bay, Skidegate Inlet, Moresby Island, Queen Charlotte Islands, B.C., Canada

Date: July 29, 1988

Sex ♀ Tova > 0.25 cm

Weight 1015g Fat: mod

Winglength  $\frac{L}{R}$  41.5 Span: 138.5 cm

Pr. length 10 29.7 7 28.4

9 30.7 6 molted

8 29.9 5 molting

Tail length 16.2

Tarsus  $\frac{L}{R}$  57.1 Toes in: 4.07 mid: 5.53 out: 5.47

Head length 12.23 Hal: 0.61

Bill length 5.42 post nares 3.53

Bill width 1.18 Gape 2.87

Bill depth Gouys: 2.10 ant nares 2.00 post nares 1.83

Brood patches: 3 refeathering.

Bill color UM: 5Y7/10 LM: 5Y7/10 spot: color 15

Eye ring color: 5RP 5/6

Irides : 10YR 8/2

Pigment : 10YR 3/1 light grains lower  $\frac{1}{2}$

Legs : 5RP 5/4

Remarks : Stomach empty. PO 10-7, 5-1.





Doug Bell  
1988

# Catalog

172558

431

Larus glaucescens

Location: Flowery Islet, <sup>near</sup> Alliford Bay, Skidegate Inlet, Moresby Island,  
Queen Charlotte Islands, B.C.  
Canada

Date July 29, 1988

Sex ♂ LT: 0.60 x 0.55 x 0.42 RT: NS NE

Weight 1350g Fat: Moderate

Wing length  $\text{L}_R$  42.4 Span 146.0 cm

Pr. length 10 29.6 4 28.7

9 30.3 6 molting

8 30.1 5 4

Tail length 17.4

Tarsus  $\text{L}_R$  6.46 Toes in 4.47 mid 5.83 out 5.76

Head length 13.08 Hal 0.62

Bill length 6.01 Post nares 3.67

Bill width 1.29 Gape 3.14

Bill depth Gonys 2.20 ant nares 2.08 post nares 1.93

Brood patches 3 refeathered.

Bill color UM: 5Y 7/10 LM: 5Y 7/10 Spot: color 15

Eye ring color: 5RP 4/6 5Y 8/4 - tubercles IF

Irides : 10YR 8/2

Pigment : 10YR 2/1 thick throughout

Legs : 5RP 4/6

Remarks Stomach full of sand lances (small fish).

no 10-1;





# Catalog

172559

~~172560~~

432

Lam glaucerens

Location: Flowery Islets, <sup>near</sup> Allitford Bay, Skidegate Inlet, Moresby Island,

Date July 29, 1988 Queen Charlotte Islands, B.C. Canada

Sex ♂ LT: 0.58 x 0.46 x 0.36 RT: NS

Weight 1320g Fat Mod

Wing length  $\text{R}$  43.0 Span 148.0 cm

Pr. length 10 29.9 7 29.4

9 30.5 6 molted

8 29.8 5 "

Tail length 16.4

Tarsus  $\text{R}$  6.08 Toes in 4.35 mid 5.97 out 5.71

Head length 12.93 Hal 0.45

Bill length 5.51 post nares 3.50

Bill width 1.30 Gape 3.17

Bill depth Gonys 2.20 ant nares 2.02 post nares 1.89

Broad patches 3 refeathering.

Bill color UM: 2.5Y 7/10 LM: 2.5Y 7/10 post: color 14

Eyering color: 5RP 5/6

Irides : 10YR 8/2

Pigment : 10YR 2/1 graying throughout greater lower  $\frac{1}{2}$

Legs : 5RP 6/4

Remarks Stomach full - 1 crab, 5 shrimp, 1 fish.

Many regurgitated worms - nematodes. P° 10-7, 4-1.





CG  
172612

Doug Bell  
1988

# Catalog

433

~~433~~

*Larus glaucescens*

Univ. British Columbia Research Farm,  
~~Box~~ Vancouver I., B.C., Canada

Location: Mouth of the Dyke River,

Date: August 2, 1988

Sex: ♂ LT: 0.60 x 0.42 x 0.31 RT: 0.55 x 0.46 x

0.33

Weight: 1230g

Fat: Mod.

Wing: (R) 44.3

Span: 154.5 cm

P. length 10 30.6

7 29.9

9 31.6

6 28.0

8 31.0

5 molted

Tail length: 17.5

Tarsus (R) 6.97

Tarsus dn 5.18

Mid 6.21

Out: 6.22

Head length: 13.68

Hal: 0.45

Bill length: 6.23

PostNares: 3.95

Bill Width: 1.31

Gape: 3.21

Bill Depth Gonyx: 2.21

Ant Nares: 2.10

Post Nares 1.93

Brood Patches: 3 refeathering

Bill color um: 2.5Y 7/10

Ln: 2.5Y 7/10

Spot: color 14

Eyering: 5RP 5/4

Lids: 10YR 8/2

Feet: 10YR 2/2 sparse grains lower 1/2

Legs: 5RP 6/4

Remarks: P° 10-6, 4-1; Stomach empty.

So.  $\rightarrow$  thru 2 lights

5 RP 5/4

CP

5 RP 5/4

5 RP 5/4

5 RP 5/4



172613

433 next page

## Catalog

434

~~433~~

Larus glaucescens

Location: Mouth of the Oyster River, VBC Farm Vancouver  
Isl, B.C.,

Date: Aug. 2, 1988 Canada

Sex ♂ LT: 0.76 x 0.43 x 0.39 RT: NS

Weight: 1120g Fat: Mod

Wing length  $\overline{R}$  43.0 Span: 149.5 cm

Pr. length 10 30.3 7 38.6

9 31.0 6 26.8

8 30.5 5 25.2

Tail length 17.5

~~Bill~~ Tarsus  $\overline{D}$  6.84 Toes in 4.59 mid 6.19 out 6.02

Head length 13.5 Hal: none

Bill length 6.6 post nares 3.96

Bill width 1.24 Gape 2.78

Bill depth Gonys 2.18 ant: 2.09 post: 1.81

Brood patches 3 refeathering

Bill color UM: 5Y 8/8 LM: 5Y 7/10 post: color 15

Eyering color: 5RP 6/4

Irides: ~~5RP 4/4~~ 10YR 8/2Pigment: ~~5RP 4/4~~ 10YR 2/2 sandy grains throughout  
lower flicking lower 1/2

Legs: 5RP 7/2

Remarks: right tarsus slightly deformed  
left tarsus no Halys

trace of immature feathering on tail

~~PO 10-5, 4-1~~; PO 10-5, 3-1, Cheesy spots on

mesenteries next to lungs.

Stomach of small amount garbage





Lg/h

172731

## Catalog

435

*Larus glaucescens* x *occidentalis*Location: Mouth of Oyster River, VBC Farm, Vancouver Isl.  
B.C., Canada

Date: August 2, 1988

Sex: ♀ 5 ova 70.20 cm

Weight: 845g Fat: med.

Wingl (R) 39.4 Span 132.0 cm

Pr Length 10 26.9 7 24.7

9 27.5 6 23.6

8 26.4 5 molted

Tail length: 15.3

Tarsus (R) 5.83 Toes dn- 4.14 Mid- 5.33 Out- 5.09

Head length: 12.09 Hal: 0.65

Bill Length: 5.38 Post Nares: 3.49

Bill Width: 1.12 Gape: 2.73

Bill Depth: Gapes: 2.01 Ant Nares 1.84 Post Nares: 1.70

Brood Patches: 3<sup>juv</sup> refeathering

Bill color um 5Y8/4 Lm 5Y7/8 spot: color 15

Eyering color: 5RP 5/4

Irides: 5Y8/3

Pigment: 10YR 3/2 light grains throughout greater lower 2/3

Legs: 5RP 4/4

Remarks: po 10-6, 4-1; Stomach empty.





Doug Bell  
1988

Catalog

172473

436

*Larus occidentalis*

Shel r  
RW

Location: Alcatraz I., SF Co., Calif.

Date: 6/3/88

(Measured Fall 88)

Sex: ♀

Weight: 860 gms

Fat: Good

Wingl. 39.2 cm (L)

Span: 135 cm

Pr L 10 27

w

7 25.5

9 27.4

w

6 24.3

8 27.1

w

5 22.3 w

Tail L. 14.1

Tarsus: <sup>L</sup>(R) 6.07

Toes: In- 4.31 Mid- 5.56 Out- 5.47

Head L: 11.74

Hal: 0.48

Bill Length: 5.48

Post Nares: 3.45

Bill Width: 1.15

Gape: 2.92

Bill Depth Conys: 2.00

ant. Nares: 1.92

Post Nares: 1.73

Brood Patches: Refeathering

Bill Color:

Spot:

Eyeing Color: Y-M

Irides: LY

Pygid: x

Legs: —

Remarks: From nest #60, on island. 1 chick

3 days old. Collected by Ray Pierotti.

Swallowed fishing line: w/hook?

1 tissue vial of wing muscle.



Doug Bell  
1988

# Catalog

DAB

436 Location: Alcatraz I., S.F. Bay, S.F. Co., Calif.  
Date: 3 June 1988 Measured Sept. 1989 - duplicate data  
Sex: ♀  
Wt: 850 g Fat: Good.  
Wing: 39.5 cm (L) Span:  
Pr L. 10- 27 W 7- 25.3  
9- 27.4 W 6- 24.1  
8. 27 W 5- 22.3  
Tail L: 14.8  
Tarsus: 5.92 (R) Toes: 4.23 Mid- 5.45 Out- <sup>5.50</sup>~~5.46~~  
Head L: 11.73 Hal- 0.50  
Bill L: 5.33 Post Nares: 3.33  
Bill W: 1.17 Gape: 3.03  
Bill D-Comps- 2.04 Ant Nares- 1.98 Post Nares: 1.73  
Brood Patches- 3 refeathering  
Bill color UM ? LM spot  
Irides Eyering Y-M  
Irides. LY  
Pigment. Q  
Legs- /  
Remarks. From nest #60 on the Cistern.  
1 chick, 3 days old, P° 10-3  
Collected by Ray Pierotti.  
Fishing line in throat. Stomach empty. <sup>Fish</sup> Hook  
at end of esophagus.





D. A. Bell

1988

Journal

List of localities  
California





Douglas A. Bell      Field Notes  
1988

Alcatraz Island, San Francisco Bay, San Francisco Co., California:

February, March, April, May

Southern California, Channel Islands, California:

4 March - 8 March, 29 April - 1 May, 17 May - 19 May

Humboldt County, California:

25 March - 27 March, 4 April - 6 April, 28 April

San Francisco - Oakland Bay Bridge, San Francisco Bay, California

Golden Gate Hill, 6.5 mi SW Mokelumne Hill, Calaveras Co., Calif.:

10 April

Monterey Bay, Monterey Co., California:

13 April

Pine Canyon, W Mt. Diablo, Contra Costa Co., California

24 April

Big Creek Reserve, Big Sur coast, Monterey Co., California

26 April

Tomales Point, Point Reyes Natl Seashore, Marin Co., Calif

12 May

Mendocino County, Humboldt Co., California

23 May - 29 May

Año Nuevo Island, San Mateo Co., California

7 June

Red Rock, San Francisco Bay, Marin Co., California:

10 June



1988

Northern California, Oregon, Washington and  
British Columbia: 12 June - 1 August

U.C. Berkeley campus, Berkeley, Alameda Co, California  
October, November, December - 9 January 1989





LOCATION: Alcatraz Island, S.F. Co., Calif.

DATE: February 26, 1988

WEATHER: Thin cloud layer, hazy. No wind until 14:00.

TIDE:

TIME: 12:30 - 15:00

12:30 - In blind, observing gulls on cistern + IB roof. Gulls are spaced out over the entire cistern, platform and IB roof. Long calls, mewling, choking, aggressive uprights, attacks are occurring → all highly territorial.

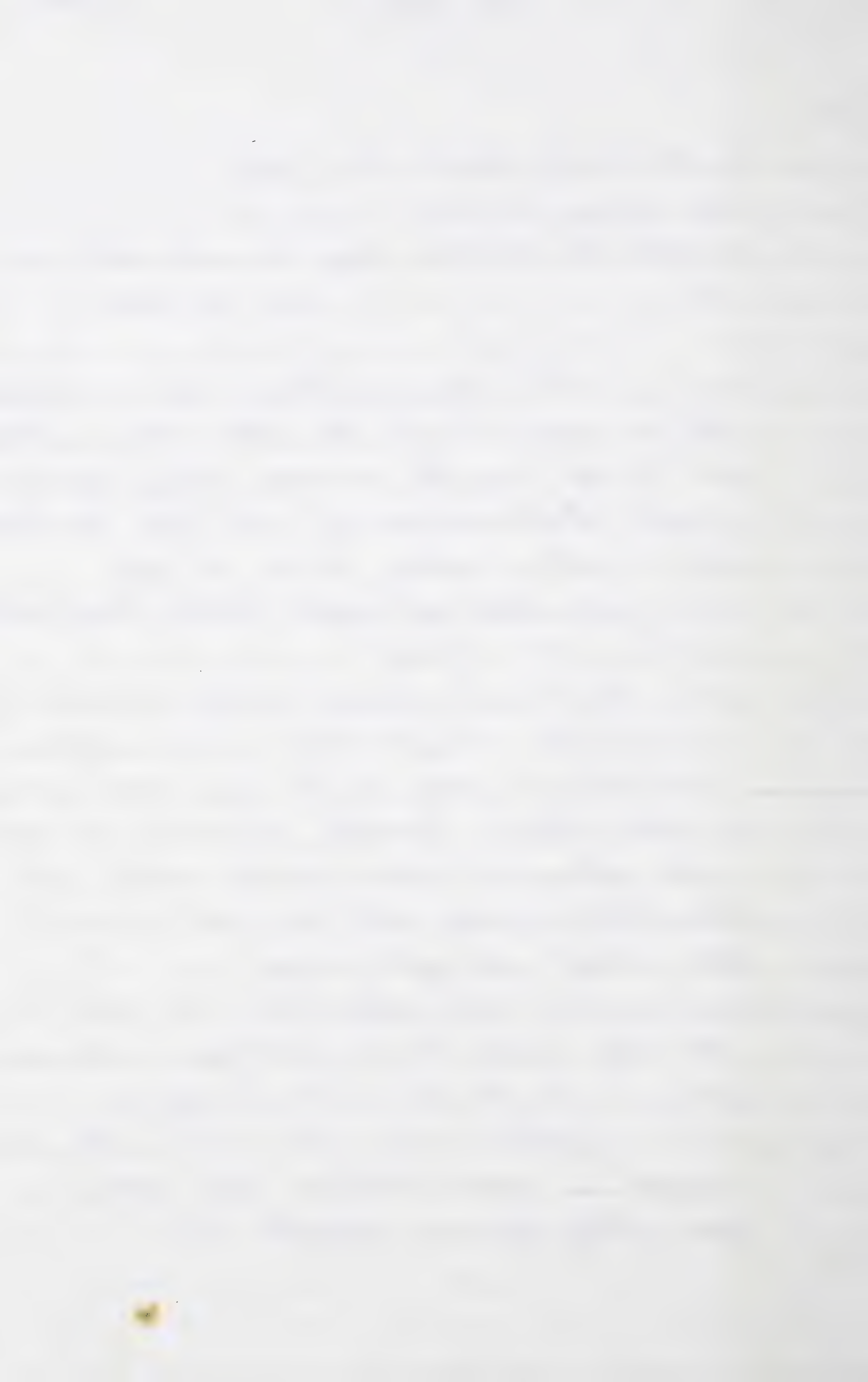
12:33 - 43 gulls on cistern; 28 on IB roof.

12:35 - major attack and grapple between two Western Gulls on the IB roof.

12:45 - Banded birds observed: 1) left red/silver (♀); 2) pink/silver - at right corner nest on platform - this bird, a ♂, was at the same nest last year. 3) silver, left leg. Generally, the adults here seem to be getting into prime breeding condition, but their bills & eyerings still have yet to develop that brilliant, deep yellow-orange.

13:28 - band 4) left yellow/silver - this could be the randy sneaker ♂ from last year, who never got a mate but did a lot of raping.

13:50 - 35 gulls on the cistern - all pretty much engaged in same activity as before: resting, grass pulling, aggressive uprights, etc.





DATE: February 28, 1988

LOCATION: Bodega Bay, Marin Co., Calif + Pelagic Birding  
Trip out to the Bodega Canyon + Cordell Banks (30 miles out).

Drove from Berkeley to Bodega in 59 minutes - a record! Arrived at 6:00 AM. Went to the boat (JAWS II) at 6:30 - with John Trickett, Durrell Kapan, Dave, Francis Will, Julie Smith, Scott Edwards. Weather was unsettled, overcast, windy. Bay itself was choppy. We were underway by 6:45 AM. A few Glaucous-winged Gulls around. Many Westerns, few Ring-billed gulls. Possible imm. Glaucous gull. Coots rafting. Couple flocks of Marbled Godwits, a few Common Loons - all in Bay. Rough water on the way out past the head. Open ocean also rough for the better part of the morning. Generally, we saw fewer seabirds than on our Monterey trip last October. In addition, the large rafts of gulls seem to have migrated out. Over the course of the day we were treated to occasional Sooty and Short-tailed Shearwaters, one Pink-footed Shearwater, possibly 4 different Black-footed Albatross, one Laysan Albatross, several Northern Fulmar - one dark, one light and one intermediate color phase. A single pomarine jaeger came by, as did a Kittiwake. Several Herring Gulls. ~~One~~ Black-footed Albatross even set down in the water! Running with the bow of our boat were several White-sided Dolphins - very close, good views. Back in Bodega Bay, the weather was clear + sunny, calm. <sup>Saw in Bay:</sup> Eared Grebe, Western + Clark's Grebes (orange bills!), Lesser Scaup, Pelagic Cormorants, Double-crested Cormorants, a flock of 20 Brant, American Widgeon + 1 European Widgeon, Pintail, Surf Scoter.





March 4, 1988 - Drive from Berkeley CA to Santa Barbara, CA. Left Berkeley at 5:10 PM, arrived Santa Barbara at 11:05 PM. Quite foggy on 101.

March 5, 1988 - Up at 3:30 AM. Steve Howarth came out of his house, I followed him along with a crew from SW Marine Fisheries Branch to the boat at the harbor. A total of 12 people loaded into the boat "Spirit of Santa Barbara"; including a pup harbor seal & sealion. The latter two were set for release at Santa Barbara Island. It was still dark when we left the harbor. It was dawn when we reached Anacapa Island. I started drumming for gulls and in no time we had a large contingent of birds around. I shot 4 birds - DAB 234-237.

Sea was fairly calm. No problems. We then proceeded out to Santa Barbara Island. When we were within 5 miles of the island we slowed down, began drumming. I managed to shoot 5 adult Western Gulls: DAB 238-242.

Used a total of 17 shells for 9 birds; but I dropped a bird with every shot except for 2 or 3. One bird I missed twice. Many others had to be shot a second time on water. Rough waves. We then proceeded on to an anchorage spot on the NW end of the island. Arrived at 12:30.

I continued working up the gulls. Finished everything by 16:00. The others meanwhile had gone



Peter Howoth

~~340~~

3930 Harrold Ave.

Santa Barbara, CA 93110

805 687-2368

or 687-7899

March 5, 1988

to shore to do seal/sea lion work. Forgot to mention, we also released the two pups. After finishing the other work, I chummed gulls in for voice recording. Worked very well! Good recordings of Long Calls, alarm calls. Some gulls were even doing choking, begging. Many gulls in this area. Also heard lots of Meadowlarks singing from surrounding grassy bluffs. We were anchored below the park ranger's quarters hut. Beautiful cliff, area. Many gulls spaced on steep grassy slope north of us. Towards dusk the others returned to the boat. We barbecued chicken, ate & drank well. After dark the water was full of Cassins? Gulls - everywhere one could hear "deee-dee-dee-dee-dee."

March 6, 1988

We were up and on our way back by 8:00 a.m. We went past Sutil Island - a gigantic pyramid. Looks like lots of cormorants nest there. After about an hour we saw 4-5 Gray Whales - close. Four spouted at once - very good views of backs, tail - within 50 yds of boat. Also Common Dolphin. We proceeded to Santa Cruz I., then cruised close-in to shore from eastern end (San Pedro Pt.) to nearly the NW end (Profile Pt.). Peter said most gull nesting areas are to be found along south NE shore & NW shore. Good concentrations of nesting gulls at Scorpion rock, Potatoe Harbor and possibly Pelican Bay. Good views of Brown Pelicans, ♂ w/ red pouch - ready to

John Smiley      Natural Sciences Division  
(UC Santa Cruz).

Big Creek Reserve

Big Sur CA 93920



March 5, 1988

breed!, but no nests yet. Santa Cruz I. is incredible, high mountains, wooded oak arroyos, the sea cliffs are Peregrine Heaven. I saw one adult Peregrine soaring along the cliffs near Profile Point. It then began soaring out and over the sea. The sun reflected its bluish back as it banked & turned. About 200 yds later another falcon was spotted diving on 2 soaring rectails. This bird was really small - may even have been a kestrel, but we were so far away, it was hard to id - it flew like a Peregrine though. At Chinese Bay we were treated to a large pod of Common & Risso's Dolphins. The Common had an hour-glass pattern of white on their sides, long snouts. Risso's were large, w/ mottled white dorsal fins & body. Some looked very white. Blunt head. Peter also took us in close to an old Bald Eagle nest. Ravens nesting nearby.

March 7, 1988.

Yesterday afternoon I drove to UC Santa Barbara - could not locate Mark Holmgren at the Museum or his office. Drove to Morro Bay. Today, March 7, I arose quite late. Went down to Morro Bay. Recorded gulls at the piers along eastern fish docks (~10:00AM). Drove over to Morro Rock, as I arrived at the eastern side I saw the tiercel Peregrine soaring up





March 7, 1988

and out over the rock. It disappeared into a bright blue sky, heading east. I talked with a Canadian who had been watching the falcons. He said they were both stooping on a Buteo of some sort - drove it into the rock. I stayed to see if the birds would reappear, but after 1/2 hour I stopped watching the rock and began recording gulls (11:00 AM). About 50 Ring-billed gulls & a few California gulls were mulling about the parking lot. Got good long call recordings of ~~lots of~~ Ring-billed Gulls. At 11:30 I drove north on Highway 101 to check out possible collecting sites. There was a road leading out to Point Estero, but it was blocked by a gate. Some people came out, told me I should call the owner first. He was busy; so I had time to drive back to Morro Bay. Asked a couple of fishermen if they could take me out to on the ocean for gull collecting. Nobody would do it for under \$100.00.00. But they did suggest I try the local dumps.

So I drove up there - it is the Los Osos Landfill, at 2295 Turri Ranch Rd., about 5.5 mi SE of Morro Rock. They, the people there, said I could shoot gulls, but only about closing time (3:30-4:00 PM). There were quite a few birds present. So I drove back up 101 to Point Estero, contacted the owner of the property. It is actually an abalone farm. The owner of the land is

San Luis Obispo  
93401

805  
528-1752





March 7, 1988

Mr. John Alexander; and the manager, boss of the abalone farm is Mr. Frank Oats. Mr. Oats gave me the OK to shoot gulls. His address is:

The Abalone Farm, INC., P.O. Box 136, Cayucos, CA 93430 (805) 995-2495. I drove back to Morro Rock, got my stuff ready for gull collecting, then watched the southwest end of the rock for Peregrines. None seen - but lots of nice potholes. Canyon Wrens singing on the rock. Quite a few Ring-billed Gulls about. Common Loons in nearly spring plumage on the bay. At 4:00 pm I went to the dump to collect, but the gulls left as I arrived. It turns out the dump has to cover the garbage each day, so this discourages the gulls.

I then drove to the Abalone Farm. Nice place - a dark-tipped P<sup>o</sup> Glaucous-winged Gull / hybrid hung around the rocks of the point. I chummed it in with bread, but didn't shoot it. It has dark irises, pinkish eye-ring. A Western Gull came in off the ocean when it saw me chumming, I shot at it but missed. The hybrid gull chased all gulls away from its area near the abalone farm waste - ~~right~~ site. A sea otter was busy feeding beyond the surf.

There were not that many gulls out here. A few individuals sitting way out on the ocean. A couple small flocks of migrant gulls -





March 7, 1988

mostly Glaucous-winged, wandered past going north. After sunset I drove back to Morro Bay.

March 8, 1988

At 8:30 am I was up at the Los Osos Landfill. The boys, Robe Barnhart and Brian Landry, said I could try collecting with their pellet gun. I did, but couldn't "stop" a gull with it. So Brian suggested I hop on the caterpillar tractor with him so we could get real close to the gulls. The gulls were spooking if I was on foot. So we did get close, but I still couldn't drop a gull. So Brian tried - and succeeded. From 9:00 am - 1:00 pm he collected 5 Western Gulls for me, all neck shots with the pellet gun (OAB 243-247). After preparing these, I went to town, bought the boys a backpack and delivered it. Then called John Smiley at Big Creek Reserve to ask about collecting. He said to stop by. So I headed north on 101; left Morro Bay about 2:30 pm.

Beautiful clear & sunny day. At the rock north of Corda I stopped to look for Peregrines. As I was watching the offshore rock I heard the kek-kek-kek of an irate falcon. An adult, ♀ peregrine flew over me - full crop - whitish bulge contrasting with barred underparts to belly - and flew after a red-tail. The falcon disappeared from sight. I arrived at Big





March 8, 1988.

Creek Reserve by about 16:30. Met John Smiley, very nice. He had to leave for Monterey right away, but said I could go shoot. I wandered out along the beach creek to the beach, passing beneath the famous "Big Sur Bridge". Several gulls were on the rocks just north of the beach. It was high tide, I scrambled up the cliffs both north + south of the beach, but could not get around the cliffs.

Went back to the beach + waited. Flock of Black-turnstones foraging on rock. Towards sunset I chummed in a few gulls. My first shot at a sitting bird hit, but it ran into the surf. I tried shooting a second, but missed, then went for the wounded one. A mistake! I should have gone right for the wounded bird. I fired, but it didn't stop the gull - it kept swimming out and out. About 15 min. later I did manage to shoot 2 gulls on the beach (OAB 248-249). I was real worried about the wounded gull. As I was leaving I scanned the ocean - and saw it, floating dead at least  $\frac{1}{4}$  mile out. What a lesson!

I was back in Berkeley by 22:30.





## FIELD NOTES

Doug Bell

Alcatraz Island, S.F. Co., Calif.

Date: March 17, 1988

Time: 11:26 -

Tide: high - rock covered

Weather: sunny, fog burned off  
low wind

11:26 - at blind on cistern. 46 gulls present on cistern. Major disputes at territories going on - grappling, etc. Recording gull calls from 11:30 to 12:30. There have been some heavy fights, both on the cistern & IB. Also much choking between 3 different pairs at one spot - near territory 26/34/27. On IB roof a great deal of interpair choking is occurring. I have seen a pair of birds choke at a choking intruder. Some head tossing occurring, no courtship feeds seen yet, but yw. 11:30 & 12:30 3 attempted copulations occurred. One, at pair 30 - which consists possibly of the yellow-silver banded ♂ (randy one from last year). There may be another ♂ trying to maintain itself at pair 30, as standoffs are occurring. Another attempted copulation took place near pair 7; and a probably successful copulation was made by pair 30 - of which the ♂ is <sup>a white</sup> ~~the pink~~/silver banded. 12:48 <sup>old</sup> ~~a new~~ silver/pink ♂ spotted on cistern. His appearance raised a ruckus near pair 31. @ 12:49 - 41 gulls on cistern. Pair 1 keeps chasing at same spot. Correction - above on banded birds. The pink silver male still seems to be near pair 32. There just might be another light yellow/silver male hanging out at the cistern. 12:59 - a male mallard landed on IB roof. Then flew up to cistern slope. Is now resting - head tucked - on the cistern itself. 13:00 recording behavior - most





Location: Alcatraz Island

Date: March 17, 1988 - con't.

gulls resting on cistern. Many other birds seen today - White-crowns singing; about 225 Western Gulls off the west end of the island; a ♂ Kestrel flew up to the water tower. Starlings, especially a male chasing a female for quite a while. As of 13:46 the male mallard is still resting on the cistern.

All day long 3-4 pairs of gulls have been disputing the grassy area off the close right side corner of the cistern (territories 23, 26, 34, 27). Even pair 1 comes over from ~~their~~ their spot to communally poke. They alternate between bouts of grass-pulling/choking, and resting resting as a group of 3 clumped pairs - odd, how close they will sit to their "enemies".



Location: Trip from Berkeley, CA to Humboldt Co., CA, return

March 25, 1988

Left Berkeley at 14:00. at 16:45 we were up at Squaw Rock, on Hwy. 101, 10mi south of Hopland, CA. Watched rock for 10 min. No peregrines seen. Someone put an American flag up on the rock. And Caltrans is building the freeway through this area. Who knows if the falcons will be successful, or even return? Maren and I arrived at the Phelps' Ranch around ~~20~~ 20:00 hrs.



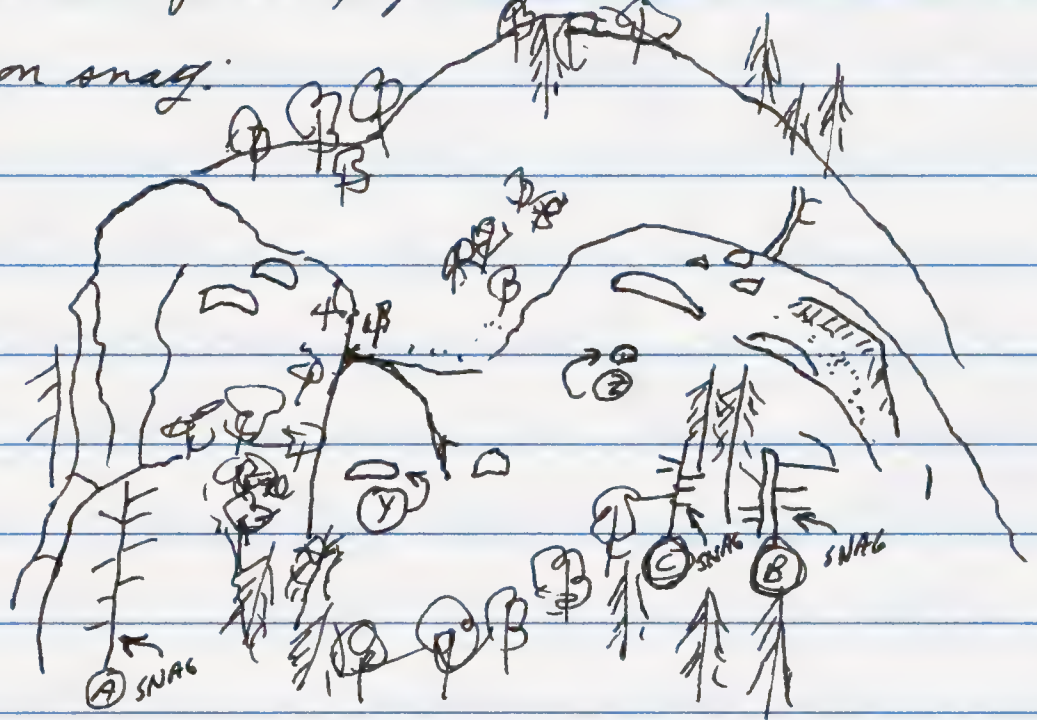


Location: Goat Rock, Phelps Ranch, 6 mi. NW Redway, CALIFORNIA

Humboldt County

March 26, 1988

0800: as we drove past rock (Goat Rock), saw Peregrine sitting on snag, at south end of rock. We drove to ridge sw of rock, got gear out. Heard screaming, Peregrine still on snag.



08:05: at observation post. Peregrine still on lower snag (A). Wailing about every 2 minutes.

08:15: Peregrine flew from snag (A) to (B). Quite actively looking about. This has a very dark head, clean breast, light barring/spotting; breast mostly cream-colored - little pinkish tinge. For about 15 min the bird has been sitting on (B); wailing regularly (every 30 sec, for a few short wails - complaining - like).

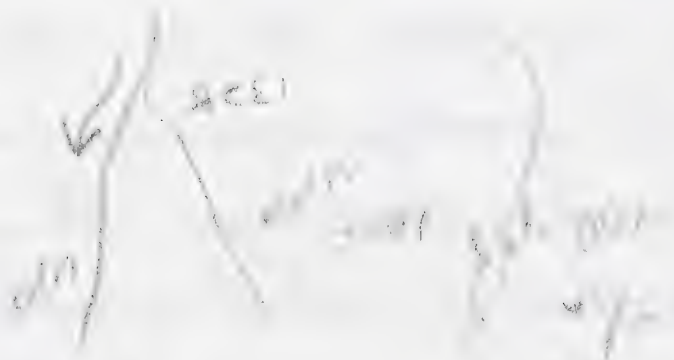
8:25: Peregrine flew to pothole (Z), which is relatively small with a thick bunch of grass in front. The Peregrine was "uneasy" in the hole - moved about almost continuously. The hole is probably deep. The bird tried several times to settle down in left corner of hole, rotating 360° - settle - rotate - settle. Then up, move to behind grass, peek at something, move



③ K Be water land  
- 2nd year



④ branch is at the lower reach  
A lower 7 years





Pheps Ranch.  
Humboldt Co, Calif.

March 26 - cont.

Look to left corner, settle, up, settle, etc. When it possibly tried to settle, it looked like it would lower head and pick or move something. Then it got up, move back to behind grass, rotated, bowed. Back to left corner - sat down, peering out hole, at angle. At one point it looked like it tried to push something with its leg. Back up - to behind grass.

This whole time it has been wailing on and off.

0:8:30 - Out of pothole to snag <sup>(No!)</sup> (c). Sitting - wailing intermittently. The pothole (d) may have been a food cache - but I did not see any deer eating.

Maren thinks she saw a peregrine pass over pickup to the NW of rock as we drove out. So was that the ♂, and this wailing bird the ♀? She

The peregrine is still on snag c - preening now.

8:45: Two falcons present! The one bird, w/ lighter breast, remained in pothole. The bird on snag (c) is the ♀ - slightly more pink & carrying to breast. Deeper wail. She was preening, wailing every so often.

Don't know where she came from. Male up, at edge, half sitting on haunches. Wailing too.

E-chucking heard 8:50 - Male flew out of hole to ♀, mated (recorded), cooed, and now sitting on same snag group as ♀, but higher up. So, fact that the original bird I was watching was male, and it was wailing a bit - it disappeared in pothole for from 8:30 to 8:45 - sitting on eggs? Making scrape





## Phelps Ranch, Humboldt Co., Calif.

March 26, 1988 - cont

earlier? The male appears to have a crop. ♀ Too, but less filled. To recap: first bird seen from truck at snag ①, the ♂. It warbled intermittently, moved to snag ③, then went into pothole ②. Was warbling from pothole, moving around quite a bit for first 5-7 minutes. Then was out of site sight in pothole for another 7 minutes. Female appeared on snag, ①. Male came out of hole, copulated. Then both on snag for 10 min.

9:10: Male gone from snag; where to? ♀ still on snag. She is definitely "dirtier" on breast - pinker, more hairy than ♂. ♂ looks like a little general. Did ♂ leave to hunt? No sign of him.

9:25 - ♂ appeared from off to the right, flew up to ♀, copulated. Both birds now on snag ①.

9:45 - ♂ powered off towards us, then over to SW; flew back to snag w/in a minute. Warbled a few times. ♀ still sitting in snag ①. Has not moved much.

The ♂ is really beautiful - yellow-orange on feet - very deep colors. Clean white breast; deep bluish-blackish cap and malar. The female's feet are more faded yellow. Her shoulders & back are more dusky grayish. Her st. flank, about where ~~there~~ femur proximally attaches to body, has a couple thick spots - imm. feathers?

10:15. ♂ warbled, flew off snag ①, to east. Few seconds later spotted soaring about rock face - made several very wide turns across face of rock, circled,





## Phelps Ranch, Humboldt Co., Calif.

March 26 - cont

returned to snag ①. ♀ had nested, still on snag ①

10:30 - both falcons still on snag ①

10:45 - ♂ flew off to the east

11:30 - ♀ still on snag C - preening

11:38 - ♀ took one short flight - circled around in front of rock then flew up to a snag in shade, still on snag ① unglomeration.

12:38 - ♀ still ~~not~~ sitting on snag ①. End of observations.

Other birds seen/heard during observation: Juncos, Kestrel, Red-tail, Turkey Vulture, Blue Grouse (looming).  
Weather - was sunny; moderate wind; cool.

March 27, 1988

05:00 - Up and ready to go to the rock.

Todd Phelps and I had decided to try to climb in to the potholes which might harbor fresh eggs. I needed to know if the peregrines have started a clutch yet, or not.

06:30 - We made our way up to the rock - sun just coming up. Very windy, bitter cold. As we made our way down from the top of the rock to the main central shelf area, before the sheer faces with potholes, we caught occasional glimpses of both falcons zipping past the rock face. An occasional falcon "wail" was heard. We tied the rope off a ~~As~~ tree and threw





Humboldt County, Calif.

March 27, 1988 - cont.

it out to try to reach pothole 2, where the ♂ had been seen sitting yesterday. After doing that we scrambled back over the top of the rock and made our way around to the front to check on the length of the rope. As we proceeded through the trees at the base of the rock, the falcons would wail a bit, but they seemed somewhat confused about where we were going. We managed to make it all the way up to just below snag (C), and got some great views of both flying and sitting. The female flew up to the snag & sat in it, looking around. She didn't see us right away. But once we were clearly visible both ♂ & ♀ began the heh-heh-heh alarming. We were pretty close to pothole 2. As we went back along the face under pothole (D), they again did some heh-hehing. They continued wailing till we got around the rock face. When we reappeared atop the rock they began wailing again, flying out over the expanse of the area in front of the rock. Unbelievably beautiful! Heavy stops with the wind & against it, also "waiting on" like circling in front of the rock. We decided to throw the rope over a different spot to climb into the main pothole (E) - where years ago I had removed egg shell fragments. I then rappelled





Humboldt Co., Calif.; March 27, 1988 cont.

into this pothole. It is about 8' ~~wide~~ long x 5-3' high x 5-2' deep. There were lots of falcon footprints in the sandy floor, and a depression in the back left corner. The depression looked trampled though. An eggshell fragment was visible, but it was small 1 cm  $\phi$ , and looked old. Only other sign was white-wash in right corner. No prey remains except for brown-tan feather. I could not swing into the hole from my position, so I did not get the shell fragment. The birds seemed to have left the immediate area - as there were no longer flying about, screaming. After climbing down ~~back~~ & going back to the top of the rock to reconnoiter with Todd, we decided to throw the rope over to the pothole ②, where the  $\delta$  had been seen. Again, this hole was empty, but there was a "better" depression in the center just behind the clump of grass, already nearly dry. The ~~deep~~ depression looked fresh. No prey remains. I think the male had been actively digging out & forming this depression yesterday when I was watching him in the pothole. I finished rappelling down. Collected flicker & down-woodpecker primaries below snag ①. We were out of there by 09:00. When we drove past the rock at 10:30, on our way out, we saw the  $\phi$





Humboldt Co., Calif. March 27, 1998 - cont.  
sitting in snag ①, just as before. So I think  
the birds have yet to begin their clutch. Both  
"most-likely" potholes were empty, yet had  
depressions. The female sure seemed lethargic,  
as she sat around from 08:30-12:30 on snag ①  
with making only one short flight. The  
male had copulated her twice, and they really  
seemed to stick around ~~the~~ pothole ②. This  
pothole is probably 3' x 3' x 4' deep. I think  
this will be the one. I am hopeful!

11:15 - Location: Briceland Road, 2 mi. W. Redway.

We stopped for 5 min. at this rock. Nice view  
of the pothole where the falcons bred last year.  
Female visible in pothole, she is lying down,  
peering out, settling, looking at ground when lifting  
up a bit, then resettling like a hen egg!

It sure looks like she is already incubating.

100-15:35 - We drove the Bell Springs Road  
from Carlinville south to Cummings. Very nice  
rocks along the way - very good potential  
peregrine sites. Saw fair number of Western  
Bluebirds, Meadowlarks, Vultures. One adult  
♂ Cooper's Hawk.

Total trip mileage: Berkeley → Humboldt Co. → Berkeley 468 miles.





Location: Foot of Bay Bridge, San Francisco, S.F. Co. Calif.

DATE: March 31, 1988

TIME: 9:25 - 9:50

Weather: sunny, clear

At base of bridge, viewing the Bay Bridge for possible Peregrines. Jeff Groth & Scott Edwards had seen one Peregrine on March 28, flying along the suspension portion of the bridge. I scanned the whole area. Lots of Western Gulls & pigeons, some Mew Gulls - actually quite a few, and some California Gulls & Double-crested Cormorants. No sign of Peregrines though.





## FIELD NOTES

Doug BELL

LOCATION: Alcatraz I., SF. Co., CALIF

DATE: March 31, 1988

Weather: sunny, clear; Wind E;  
mild.

TIDE: High, decreasing

Time: 11:40 - 14:00

At blind on cistern observing Western Gulls. 11:56: 47 birds on platform. Most sitting, resting.

Banded bird: white/silver near 30; and yellow/silver near territory 32/31; 12:14 - the yellow/silver ♂ is at the nest on territory 31 - he got up to chase a ♀ away. Two different faded pink/silver ♀♀, one ± paired inbetween 36 & 32, the other hanging out near 35/5, but often getting chased away. Silver left leg ♀ at 36. Another yellow/silver ♂ juv. 33 & 36, yell./silver ♀ juv 32/30.

13:00: 41 gulls on cistern. Interesting - lot of territorial activity, as before. Some head tossing. No courtship feeding seen yet, and no copulations yet today.

On IB one gull has a bright red/silver band combination. Other birds seen - starlings, house finches - several; white-crowns & song sparrows singing.

Raven (1); Glaucous-winged Gull - ad. except for brownish bill tip.

About 250 Western Grebes off west end of island. Some Double-crested Cormorants.

I was with Dave Lewis & his 11 yr old son Eric & his friend Jacob.





April 4, 1988

On my way up to the Phelps Ranch in southern Humboldt County, Calif., to observe the Peregrines. Left Berkeley at 3:00 pm. Arrived at Squaw Rock at 5:00 pm. Watched for 10 min., no sign of falcons. Continued on. Arrived at Pam & Todd's house at 7:45 pm. Good timing!

Side Note: Monty Kernen observed Squaw Rock on April 5, 1988. Saw food exchanges & incubation in progress.

PS - I saw the Ravens incubating - just as I did last week when at Squaw Rock.

Other birds observed at the Phelps Ranch, between April 5 - April 6, 1988 -

Blue Grouse (heard)	Starlings
Meadowlarks	Mountain Quail.
Brewer's Blackbirds (flocks)	interesting - did not
Acorn Woodpeckers	see any Band-tailed
Juncos - neat territorial scuffles.	Pigeons.
Golden-crowned Sparrows	
Golden Eagles (2 - soaring over Mattole R.)	
Pileated Woodpecker - calling.	
Ravens, Crows	
Anna's Hummingbirds	
Western Bluebirds (nest building).	





April 5, 1988

7:07 AM - With Todd in truck - at Goat Rock. ♂ penguin on snag (A). 7:10 AM - We parked truck, walked out SE ridge to observation point. ♀ seen sitting in pothole on, standing on right corner. When we reached obs. point, she walked over to left corner of pothole, settled down into left corner - hunched a bit, looked almost as if she was eating, then settled down like a hen at 7:15 AM. ♂ on snag way over to right of rock (B). 7:30 - ♂ left snag (B), lost sight of him, heard scream, somewhat deep & pissed, then at 7:34 ♂ reappeared on snag (C). 7:38 ♂ cast. 7:39 ♂ off snag (C), flying direction to east. 7:42 ♂ flew past rock face, circled a couple times at pothole level, then screams, then up to snag for upper right. 7:44 ♂ off, quick to east. ♀ had shifted on eggs.

8:16 - ♀ still on eggs in pothole - actually peering out, watching stuff. Her head is just visible over ledge - can even see her bill, eyes, nostrils. When Todd left at 8:06, he started up the truck. This caused ♀ to pop her head up, and really look in the direction of sound.

8:32 - ♀ still in pothole, as nest, looking about.

Can hear some noises & dogs from Mark Boars place. 8:34. ♀ <sup>shifted</sup> resettled on eggs - stood up & slightly, resettled.



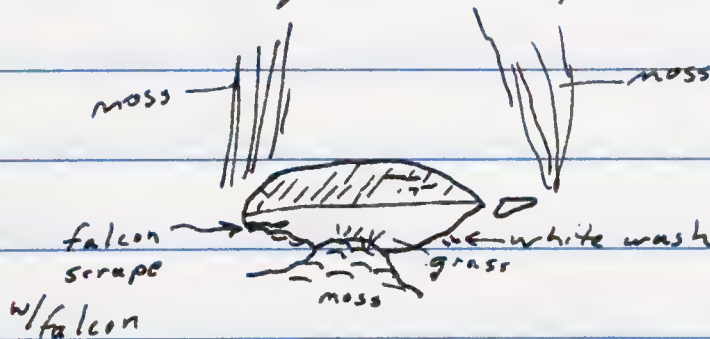



April 5, 1988 cont

8:52 - ♀ shifting on eggs(?). She has begun making bobbing motions with her head, as if reaching down to pick at something on the ground, while maintaining her body horizontal, sort of hunched. In the course of 2 min. she bobbed about 14 times, rotating her body around twice through 360°. At one point, she appeared to lie on her side - "listering". Could also see her back feathers rouse - from the heat. Only once did she sit "straight" up to look out. Seemed like a lot of activity to me. Possibly even some "dry burrowing" going on - as if she were about to take a bath in cold water.

8:58: ♀ has settled down completely again. I think her back is towards me. The weather was cold, clear this morning. Light frost on grass in shade. Heat waves now rising off ground in sun - the pothole must get quite warm!

9:03 - Nearly entire upper half of pothole in shade:



9:06 - ♀ shifted again. 9:24 - ♀ sitting up, looking out of pothole, then shifting, picking, shifting, rotating, shuffling in scrape.  Rotated at least once, now facing out of pothole. Lots of head motion to eggs. She might be panting from heat. 9:30 settled back on eggs. 9:57 - ♀ still in pothole, on scrape. It looks like she is now partially in shade, Pothole is over 2/3 shaded on the back





April 5, 1988

small. Saw a pair of kestrels sitting on top a large snag on the small peak to the south of goat rock. The kestrels copulated - unusual - the ♂ did about 5 purring motions 10:00: the ♀ is definitely in at least partial shade in her scrape. 10:06 - ♀ shifting on eggs again, stood up straight, preened out, resettled. 10:42 - Male in, female out of pothole, screaming. Both landed in snag (C), on branch next to one another. Female tugged at prey in males foot, didn't release right away. Female tugged food away, flew to snag (B) top, ate. Small bird < jay sized? Male flew into pothole, landed directly on scrape, ate about 10:46. He settled on scrape, then got up, walked to ledge, ♀ screamed couple times, purred off hek-hek, both birds looking up. Then male returned to settle on eggs. Female flew from snag (B) to low trees below (C), sitting in shade.

11:02 - ♂ on scrape.

April 6, 1988

08:40 - Female screaming on ledge. Flew back to pothole & snag (B). Sitting atop it preening. Male in pothole (X), on scrape. Monty Kiiven had mentioned some good pointers on Id'ing male vs females adults: Females look more slate gray, have p'tips that tend not to protrude below the tail, appear more scruffy, or fluffy, as they are more advanced in molt - may also have dropped #7 by now. Males are more dark blue, appear "neater".

note:

- Todd mentioned that 3 falcons were present at Goat Rock at start of the 1987 Season.
- In 1984 Goat Rock had a complete clutch of eggs on March 28. These were taken, but, the Peregrine Fowl couldn't replace the eggs soon enough with chicks, so the birds abandoned.



April 6, 1988

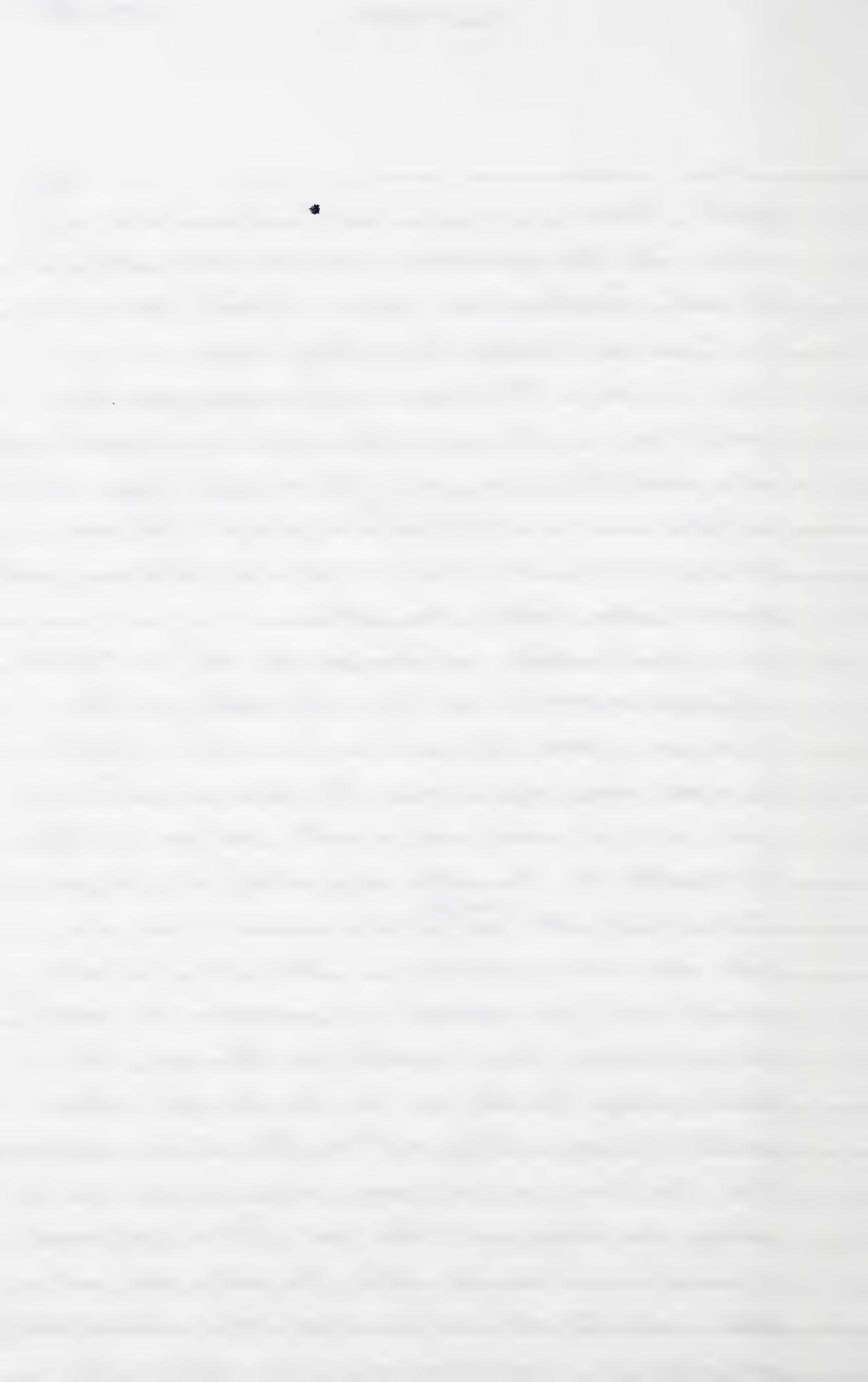
08:50: Todd has begun chain saw over near w. end of the rock. The falcons have shown absolutely no reaction to it, in spite of noise being clearly heard.

8:57- The female is still on snag c - she was preening, also wailed every minute or so. She has her back turned towards me - was stretching her right foot in that classic - called foot falcon manner. Her back is very light slate grey, and is two-tone - the secondary coverts and tertials are lighter than the upper shoulder & head feathers.

8:57 - female wailed, is looking up the rock. I think she is trying to convince the male to go off hunting for her.

I can see 6 faint dark bars, thin, on her tail. The tail tip is just barely fringed in cream. Her legs are pale yellow, as is her cere. The male's head is visible just over the ledge of the pit hole - he's been sitting very calmly on the eggs.

9:04 - female still <sup>wailing</sup> ~~wailing~~ every minute or so; her rate seems to be increasing. I think she is missing primary no. 8 - as evidenced by a gap when she warbled her right wing. 9:12 - ♀ warbled her left wing, then turned sideways towards me. So now her right side is visible & Preening, scratching right ear often. She has substantial thick black barring on her flanks & thighs. It goes over to spotting / thin barring just below breast. There is a fair amount of pinkish hue to her upper belly. Her head is dark, with a thick melan strip such that she almost has a continuous dark cap, except for a white chin and a thin stretch of white





April 6, 1988

proceeding behind the male almost up to her ears.

9:31 - ♂ shifting on scrape. 9:42 - ♀ still on snag (C).

A hummingbird harassed her a bit. The ♀ has about a  $\frac{1}{3}$ -full crop.

9:55 - ♀ took off, circled around in front of rock, passed scrape; wailing. Landed in snag (B), wailing with drooping wings, begging - ♂ still on scrape. The scrape is just now coming into shade. 9:57 ♀ still wailing. She appears to have a "divit" in her breast feathers, at the furcula.

10:04 ♂ still in scrape - his yellow-orange <sup>eye ring</sup> head & cere are visible. ♀ still in snag, wailing intermittently.

10:13 ♂ off the nest - flew to lower branch on snag (B). ♀ wailing at him from her perch, with hunched shoulders, drawn out wings - wailing just like an eagle. ♂ sliced, then preened.

10:16 ♀ flew in to scrape. While still wailing, she settled on her eggs! I still think the ♀ has a small dark spot on her lower right thigh. 11:30 - ♂ left cliff; and of <sup>♀ still on eggs; observation.</sup>

11:00 Met Matt Nixon and Matt Mollen of UC Santa Cruz Peregrine Fund in Carmel.

We then drove back up to the ranch. Parked behind Goat Rock; Matt Nickson will climb in to the eyrie to take the eggs, if any, and switch them with dummy eggs. The real eggs will be taken back to UC Santa Cruz, where they will be incubated in the safety





April 6, 1988

of a controlled environment. Matt showed Todd & I the dummy eggs - they are an epoxy-base replica - weigh exactly as much as the real thing (very important! otherwise the falcons abandon them), and are colored similarly. If all goes well, the Peregrine Fund people will put 2 chicks back in the scrape in about 3½ weeks. They always use 2 dummy eggs for the switch. Matt has a Peregrine Fund incubator in the truck. It plugs into the cigarette lighter. A major problem is overheating, especially in warm weather, so they try to run the incubator cool: 98-99°F. Matt was saying that the Peregrine situation in California is still critical. Of 13 sites on the central coast - between Monterey & Diablo Canyon, only the northernmost one & southernmost one are laying good eggs. The rest are laying "dead" eggs. Big mystery here - as not only are the eggs thin, but dead right from the start. Another thing is chick death just after pipping. He said one can see a "polluted" egg - the membranes are all brown at hatching. The chicks are dying of infections - maybe brought on by persistent loading (thin shells as a bad barrier?). Another problem is a skewed sex ratio; there are fewer adult males than females. One male even switched females along the Big Sur coast. ~~One~~ The one females





April 6, 1988

territory he left, was a bird that preyed exclusively on gulls! He would sit & ambush them as they came around points. The Diablo Canyon pair was double-clutched this year, as they laid a set of eggs in mid-February. Many other pairs along the Big Sur coast have laid dead eggs in March.

17:30 - Both Matts, Todd & I made our way down to the eagle cliff. As we were driving up the mountain we saw ~~what~~ both falcons flying in front of the cliff - it may have been a food transfer. Anyway, we set up the climbing gear, the birds are quiet. Not until we got the ropes to the edge of the cliff did the birds spook, first the ~~male~~ male, <sup>from a snag,</sup> then the female from the scrape. They began screaming & circling in front of the rock. Our plan is for both me & Matt Nixon to descend parallel. We went over, but I had some trouble with a tangled rope. Matt arrived at the pothole first, and he excitedly said: "3 eggs." I made it down to the pothole. Matt carefully sifted around the scrape for shell fragments - not many big ones, but lots of little ones. He was ecstatic about the site. The 3 eggs were gorgeous! all spaced a little bit apart. Matt picked each one up, put them in foam-lined containers. Replaced the 2





April 6, 1988

dummy eggs in the scrape. He suggested we clean the roof of the pothole - also thought it best to take off the helmet before moving around in it, as it is easier to judge perspectives & not bump your head w/ the helmet off. Anyway - we picked up a meadowlark feather, a broken secondary tip from one of the falcons, some food pellets (this stuff all goes to Legged Kiff of West. Found. Vert Zool for analysis). Then I ~~was~~ rappelled down, & Matt climbed up. The scrape & ledge looked just beautiful w/ the 2 dummy eggs in the scrape. We were back at the truck in no time to examine the eggs. Two of the eggs seemed to have small white pits, which Matt thinks is the first sign of a thin-shelled egg. One egg looked fine. All three eggs were placed, air-cell up, in the portable incubator. By the way, no one down at Mark Boers house saw us - it was uninhabited, but Phil did check us out with binos as <sup>we</sup> were climbing over. So it was all quite nice! We drove back to the ranch house, showed Pam the "Easter" eggs - chatted, then headed down the long road to get out. As we passed Goat Rock, it was about 19:10; we hiked down to the trees on the SE ridge and could see the falcon's head, sitting on her eggs on the scrape! Good news!





April 6, 1988

We did not get back to Garberville until 9:21:00, as the Peregrine Fund guys wanted to go as slowly & smoothly as possible. Did not get back to Berkeley until 1:30 AM.

April 7, 1988

Matt Nixon called to say that the 3 eggs indeed appear to be OK, with no overt eggshell thinning. The pits were thought to be normal. Now, only time will tell if they hatch. All in all then, there were no eggs in the scrape on March 27, 1988, when I climbed in to inspect it. If the falcon laid her first egg the next day, which she might have, since she was so lethargic, that would mean, Monday, March 28 was first egg. Every 52 hours later they lay, so she probably completed her clutch on ~~Monday~~ Friday, ~~at~~ April 1. This would mean that the eggs had 5 days of incubation when we took them (maximally). It takes 32 days for the eggs to hatch. So hatching should be around May 2.





Location: Golden Gate Hill; 6.5 miles SW of Mokelumne Hill, Calaveras Co., Calif.

Date: April 10, 1988

Maren and I left Berkeley at 7:45. Travelled Highway 26 to Golden Gate Hill (off State Route 12). Along 26 we found a freshly killed Lewis Woodpecker (ad.). Parked at the access road to the Communications Towers atop Golden Gate Hill. Began hiking up to the hill at 10:55. Passing through grassland/oak trees. Lots of Western Bluebirds, Starlings, Western Kingbirds, Lark Sparrows, one American Goldfinch. Lark Sparrows were particularly engaged in territorial disputes + singing their warbles. Imm. Red-tail, Violet-green Swallows, white-throated Swifts circling in the hot air; the temperature was at least 75 and rising. We ascended into mixed ~~brush~~ Digger Pine, Manzanita, Live-oak scrub woodland. Lesser Goldfinches feeding on seed grasses. Numerous Anna's Hummingbirds in the Monkey Flowers. Rufous-sided Towhees, Brown Towhees in scrub. At the top we had to hike through chaparral to get to the cliffs on the SE face of the hill. At cliffs by 11:00 am. Very hot in sun. Loads of White-throated Swifts, Violet-greens, some cliff swallows. 2 Red-tails soaring; about 10 Turkey Vultures. A Blue-gray Gnatcatcher appeared for a minute out of the Chaparral. Found a cave in one of the cliffs - cavern-like, room-size. Cool - lots of Swift nests (half-cups) + one Cliff-Swallow nest, plastered up against the ceiling. On many ledges were great swaths of white and pinkish-white excrement. The floor of





Location: Golden Gate Hill, Calaveras Co., Calif.

Date: April 10, 1988

cavern & ledges were littered with countless rodent-bone parts & skulls, as well as owl pellets. I collected a few skulls and a couple owl feathers - Barn Owls. No birds were seen however, and, at least in this cavern, it did not look like owls could successfully nest. While eating lunch an imm. Coopers Hawk sallied forth just across a cliff-top and began soaring up into the ever-hot sky. He circled up into the nuthatches & red-tails, getting lost in the dizzying heat waves.

As it turns out - the rancher came up with his son and seemed quite upset at our presence. He was nice, we talked up a storm, but he did kick us off the property.





April 13, 1988

Left Berkeley, Calif. at 05:38. Drove to Monterey. Arrived at 07:45. Met Chris Harold at John Hopkins Marine Station at 8:15. We will be going out on the HMS Friendship, a 35' Farallan class boat. George, Peter and Nina are Chris' coworkers. For the greater part of the day will be sitting about 200 yds offshore of the Marine Station, where they do their dive censusing. From 10:30 - 16:30 we sat offshore of the John Hopkins Marine Station. Lots of birds moving about, especially large numbers of imm. Ring-billed Gulls. Fair number of California Gulls - both imm. & adult. Occasional Brown Pelicans, small flocks of Brandt's Cormorants and individual Pelagic Cormorants. One winter-plumage yellow-billed Loon, one <sup>+</sup> spring plumaged Common Loon. All day 4 Eared Grebes were foraging near the boat. Western Gulls, imm. & adult, present over entire area; but more imm. than adult. Some Glaucous-winged Gulls, including adults! Young Sea Otter popped up near the boat. By 16:30 we finished dive work; then headed away from shore, chumming gulls as we went. Mostly Ring-bills + California Gulls followed. I did manage to collect 4 ad. Westerns that came into the boat (4 shots, dropped 4 birds, but needed 2 more shots to stop a wounded bird in the water). We were in to land by 17:30. I left for Ventura by 21:30 - had to stop just north of Santa Barbara by 23:00 to rest.





April 13 - 14, 1988

Arrived in Ventura by 0:500 on 14th April.  
Waited at Channel Islands Natl. Park Hdqts. for  
Dave Lewis. The plan was to head for San Miguel  
I by 07:00 with Park Service Boat: Sea Ranger. But,  
the weather turned so bad (Pouring Rain, high winds),  
the boat trip was cancelled. Got my collecting permit  
from the Park Service, I cannot shoot birds, only  
trap them. Also heard from Ranger on San Miguel that  
there are no nesting gulls; the Ranger from Anacapa  
Island ~~also~~ has no seen incubating gulls yet. Only  
option is to try again. Will return on Monday for  
a trip to Pinnace Island (off of San Miguel Island).  
Anacapa Island Ranger: Yvonne Marnard <sup>(805)</sup> \*654-2418  
Shipper: Dwight Walley: (805) 648-7327  
Pk. Hdqts: 408 688-8848 See Frank Ugolini  
Boats: 38' Sea Ranger } Gary Davis.  
52' Pacific Ranger } Hatteras Class





Aleutian Island, S.F. Co., Calif.

Time: 10:36 -

Weather - intermittent  
thundershowers

Tide - Low, 1.5m rock exposed.

April 20, 1988

On cistern, in blind observing gulls. High level of activity going on. 10:38 - 59 gulls on the cistern area. 3 birds might be incubating. The ♀ of pair 30 is banded - silver, left, ♂ not banded. ♂ of pair 31 banded yellow-silver, left. Looks like ♂s of pairs 33 & 36 are banded, silver left. Two courtship feeds seen so far - one was a pigeon leg, other was fish, medium sized. One attempted copulation, one successful, nest building activity too. 11:30 - 32 gulls on cistern. A pair of gulls is on the water tower - ♂ has darkened left ear. 11:48 - 2 courtship feeds seen - one of a large fish, other of anchovies. 2 copulations. Recording gull voices. 12:00 2 more copulations seen, recorded on tape. Went out to the cistern area to count nests, check for eggs:

~~10:00~~ 23 nests counted on cistern; but no eggs found. Surprising really. Back in February it seemed like this would be an early year. 13:00 - 14:30 - attempted trapping with noose rings laid out over nests (2) on perimeter west of Industry Building. Since the nests were eggless - no luck, gulls ignored the traps. Heavy rains, intermittent. I did however, surprise some gulls on the Power House, and unintentionally, cornered one along a cyclone fence. I caught it (VAB 234). I don't know if it was sick, but its primary tips are all quite ratty. Seems to be heavy & in good fat though! Other birds observed on Aleutian





April 20, 1988

include Starlings (I think they are even nesting in the Industry Building), Mallards - 3. A flock of Pine Siskins were on the cistern area - recorded. White-crowned & song sparrows. House finches. Black-crowned Night Herons - the colony in the ~~enclosed~~ Monterey Pines ~~was~~ east of the cellhouse was quite active - clapping of young bills begging for food? Ravens also wandering about the island - to the gulls' consternation.

16:00 - 16:30 - at base of Bay Bridge - S.F. side. Lots of gulls - even a couple Glaucous-winged. Double-crested Cormorants. Scanning the bridge & Ferry-Building area of SF for Peregrines. No sign of such.





April 24, 1988

From 14:00 - 17:30 hours Maren and I hiked up and down Pine Canyon, off of Castle Rock Park, at the foot of Mt. Diablo (west side), Contra Costa County, Calif. The weather was cool, intermittent cloudy/sunny. Lots of wildflowers, many meadows were still green. The more exposed hills of Mt. Diablo are brown and dried. We saw several male and 2 female Mallards at the dam & sulphur springs. Lots of Redwings along creek. Many Calif. Quail calling. A pair of Red-tails and usually 5-8 Turkey Vultures soaring about the rocks. 2 Kestrels near the first batch of rocks. Heard a Stellar's Jay imitate the "chuck e-chuck" call of a falcon! Saw one Prairie Falcon, high over the rocky ridges, flying in a slow, straight line due north. It looked to be molting. No other falcons seen. The old stick nest - which I saw here ~~over~~ in 1971 in the largest rock, is still present - looks freshly renovated. Lots of cliff Swallows in various overhangs. A ~~good~~ good potential falcon pothole was seen on a ridge-top, SE facing rock south of the main cliff. Lots of experiment: Kestrel, Prairie Falcon? But, lots of people in this area. Some rock climbers too. Other birds: Robins, Junco (nesting), House Wrens abound along the creek - nesting. Northern Orioles, Black-headed Grosbeaks, White-throated Swifts, Warbling Vireo (2), Brown Towhee, Rufous-sided Towhee, Bushtit, Nuttall's Woodpecker, Flicker, Scrub Jay, Starling, Bewers Blackbird.





April 26, 1988

Left Berkeley at 11:00, arrived at Monterey 13:00. On Highway 1 south. On the small, grass covered, off-shore rock (actually, it is separated from mainland by a split) about 1 mi. S of Rocky Point, I counted 71 gulls in territory. Rocky Pt. itself looks like it could harbor a peregrine eyrie. A couple gull territories on small rocks just off Rocky Creek. On rocks off Rocky Creek & Division Knoll: ca. 20 Brandt's Cormorants nests & > 200 Common Murres. Scattered Gull Territories.

14:00 - at Division Knoll, just S Rocky Cr., ♂ Peregrine, adult, powered across Hwy 1 up slope to sit on wire next to pole, upon ridge. Gorgeous! Dark head - quite faded back proper. Cast. 14:10 - left dis. site, bird still sitting. Stopped along Highway 1 at various points. Arrived Big Creek Reserve <sup>Monterey Co., CALIF.</sup> at 15:30.

Went out to Beach & set up rose-ring with bread. Lots of gulls around - many immatures. They came in to my trap right away - caught 2 birds - an adult ♀ (DAB 235). But after that, they did not come in for food. Tried trapping until quite late, then decided to shoot. Shot 4 more birds (DAB 236-239).

April 27, 1988

Shot one bird on beach at Big Creek Reserve, Monterey Co., Calif. (DAB 240).



Pebble Beach grower El Sur Ranch

James Hill

PO Box 1588

408 624-2719

Monterey, CA

93942

April 29, 1988

Departed Berkeley at 15:00 yesterday. Arrived Santa Barbara @ 20:30. Not bad. Travelled with Navy boat out of Port Hueneme at 9:00 am. Arrived on Santa Cruz Island around 10:30. Met Lyndall. Also big group of people from Santa Barbara City College - working on insects. We were driven from Prisoner's Harbor up to the bunk houses west of Stanton Ranch. Neat birds along the way - Santa Cruz Island scrub Jay - great colors - very deep blue. Saw two banded birds. Really gorgeous. Much intricate praging. Bewick's Wren sing a diff. different dialect here. House Finches - feeding young. Barn Swallow on the pier. Morning Doves - lots! Starlings, Mockingbirds. Kestrels - young legging. Ravens. Red-shafted Flickers. (Almost forgot - saw 2 Sooty Shearwaters on trip over). Song Sparrows abound near residence.

15:40 - 20:00 Lyndall drove me out to West End (Forney Cove + Fraser Point) of Island. Along way we saw several Calif. Quail; one peacock at 150' overhead! Absolutely impressive cliffs, gigantic caves, together w/ washes, reminds me of Arizona, nearly Grand Canyon. Fair numbers of Meadowlarks, & Horned Larks out at point Fraser Point. Large flocks of Puffins & gulls feeding. No nests of gulls yet on "mainland" where Lyndall said they nest. Not even on offshore rocks yet - although





April 29, 1988

it appears as if several gulls might be sitting on nests on one rock. Lyndal saw flock of  $\pm 100$  Arctic Loons. 1 Marsh Harrier (♀). I collected 2 gulls DAB (261, 262). 2 shots, 2 birds + 1 shot to finish one bird. Also saw 3 piglets (black) + mom.

April 30, 1988

Drove from the station by myself out to the trailer at West End of island. Located near Forney Cove. Along the way saw Calif. Quail - always in pairs. Rufous-sided Towhees. Starlings. Flickers. Rufous-crowned Sparrow! Song - buzz of one series of similar notes. Ravens galore. Horned Larks (one nest w/ 3 eggs). Near Forney Cove I collected 4 gulls - in 7 shots - bad! 2 birds I clearly missed.

One had to be finished w/ 2 shots. DAB 263-266.

At about 16:00 went back out to Forney Cove, collected 2 <sup>2 shots</sup> more gulls DAB 267, 268. Around 19:00 hrs went out and tried getting some birds for Ned. Took 6 shots for one bird...

May 1, 1988

Up collecting at 10:30. I had to first prepare the 6 gulls I collected yesterday as skeletons, hence I was out rather late. Shot 3 gulls (4 shots) just down from the trailer, near Forney Cove. DAB 270-272. Also collected a bird <sup>DAB 273</sup> for Ned. Spent the mid-day getting these ready. In late afternoon I went back down to the shore, saw Oystercatchers and





May 1, 1988

a couple Willets. Also collected another bird for Ned (DAB 274). Around 14:00 I gathered all my stuff together and began heading home. Checked out the cliffs just east of Erneys Cove - some Pelagic Cormorants nesting and found 2 gull nests - but no eggs yet. On ride home saw 10 Pigs - 2 checked 2 black full grown; near airport; one black medium size over ridge; one black, one checked; one black; one checked; all medium size, and on the way to the valley also 2 foxes - wow! Really tiny, colorful things.

May 2, 1988

Got up at 6:00 with Karen & Kathy. Drove out ridge road to the west because the girls were checking Bishop Pine sap taps. Birds seen along the way: Rufous-sided Towhees, Scrub Jays, Ravens, Red-breasted Nuthatches, Calif. Quail, fledged Noddy. Saw another Island Fox on way back to residence. We then packed up our gear, and I drove the large truck back to the boat dock. Off the island by 13:30. Spent the night at Carpinteria State Beach (\$2.00 fee.)

May 3, 1988

Went to Anacapa Island with Park Service boat. Trapped gulls off nests on east-facing slope of East Island, about 200 yds from buildings. Lots of gulls on eggs - nests had 1-3 eggs. Trapped 3 ♀♀ (DAB 275-277). Saw pair of Orange-crowned Warblers, ♀ begging ♂.





May 12, 1988

Drove with Dwight Harvey up to Point Reyes National Seashore. We went to the end of the paved on Tomales Point, and hiked north along the point about 2 miles to the trail down to the last beach along the west side of Tomales Point. This is the same beach where I had shot gulls with Fred Sheldon & Dwight last year; it's just north of McClellan's Beach. The weather was clear and sunny in the Bay Area, but when we got to the Seashore a front came in, wind and drizzle made over to our position. The winds were in the wrong direction, out of the South-East. Consequently the gulls rounded the point a couple 100 yards offshore, instead of flying right by when the winds are North-West. So the shooting was far & few inbetween. Plus, I missed a lot - 11 shots for 4 birds - one I shot twice before it finally came down (DAB 278-281).

Several Ravens and Red-tails, few Brown Pelicans, lots of Calif. Quail.





May 13, 1988

Went to Alcatraz Island with Ray Pierotti.  
We set up traps to catch banded Western Gulls.  
Good luck today, caught 8 gulls: five, which were  
banded, were color banded & released; three I  
kept DAB 283, 284, 285. Birds 283 + 284  
were a mated pair.





May 17, 1988

Travelled on Park Service Boat with Dave Lewis and several others to Anacapa Island. We went first to the West Island, and cruised slowly from the point eastward, looking for Puffins. None seen. Lots of gulls, pelicans. Saw several Sooty Shearwaters on way over. High winds; increasing. Will stay on <sup>the East</sup> island for today (Tues.), Wednesday, and come off Thursday. Dave's & my plan to go to San Miguel Island fell through. I helped Dave set up some 50x50 m marking grids on Western Gull habitat. We went around and pounded stakes into the ground next to nests. Most Western Gull nests had 3 eggs. A few eggs were pipping. After about 16:00 I went to the area west/north of all the buildings - near Dave's C-Grid. Poor success - frustrating. Very strong winds, gusty. Only caught 2 birds (DAB 285, 286). Didn't stop trying until 20:00. On Anacapa today I saw 2 kestrels, ad. Red-tail, Meadowlark (1), Horned Lark (1), starlings (~8); Ravens + 1 fledged young, Brown Pelicans.

May 18, 1988

Still on East Anacapa Island. Went out to the walk-in trap that was set last night. In front of Diane Green, Steve James, Dave Lewis, caught DAB 287. Mated to 285. Then tried catching another bird whose mate I got yesterday. The weather





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May 18, 1988

today is clear, sunny and calm. After trying for the other bird I went back to the house, then down to the boat to see Dave Lewis off.

They left about 9:30. I then went back to work gull trapping. Set 3 noose traps out near the lighthouse. Caught a female right away NAB 288. Then set a walk-in trap out west of the houses. Caught a male right away 289.

Then went back to the nooses - captured a female off a 3 egg nest 290. Back to the walk-in, caught female 291 (mate of 289). Back to the nooses - caught the male of (290) = 292. Reset walk-in trap on a noose site (<sup>for</sup> 288). Will try to pick this bird up tomorrow. Spent most of the afternoon 15:00 - 18:00 preparing these gulls.

In the course of the day I saw & heard several Bewick's Wrens, House Finches (w/ fledged young), Orange-crowned Warblers, one Western Kingbird, Barn Swallows, ~~that~~ White-throated Swifts (especially near the lighthouse).

May 19, 1988.

Was picked up at Anacapa by Drought Willey, <sup>Randy</sup> Dave Lewis. The boat headed out to San Miguel Island. Long ride - beautiful day - calm. On way past Santa Cruz Island (south side) saw Red-throated Loons, Northern Phalaropes (in spring plumage), Pelicans, gulls of course, pods of Cassin's Anchovies,





May 19, 1988

Individual or pairs of *Xantus Mureletts*, a flying fish!, large pod of Risso's Dolphins + young ones - probably  $\pm 25$  dolphins. Wind & waves not too bad. We arrived at Prince Island about 13:30.

Landed on the south side with an avon raft - Dwight ferried Dave, me & Martha to shore.

Prince Island is gorgeous - really desolate - lots of prickly pear cactus on south slopes. Colony of Brandt's Linnormants, some double-crested cormorants.

We first hiked up to a battery of Cassin's auklet burrows - searched through them for chicks. Found 2 chicks, several eggs - always 1 egg per nest

except one nest had 2 eggs. Nest birds - most of the nests checked (25) had been occupied, but the chicks had already fledged. We then hiked up

to the top of Prince Island. Saw House Finches on way up. At top lots of gulls nesting - also on the north slopes. More auklet burrows too. I set my traps out and waiting along the south/west face.

Nice view of Hoffman Pt. on San Miguel - where Peregrines may be nesting. As I was waiting for

gulls to go onto or into the traps, I heard the irritated "kek-kek-kek" call of a Peregrine. An immature, year old bird came flying over, its attention and screaming directed at me. It looked a bit bedraggled - in a

heavy molt - but it had a mostly brown feathers - heavy streaking on breast. I was surprised at how





May 19, 1988.

"tundra-like" its major strip was, and head region. It circled over the top of Prince Island, along with lots of gulls - and made a couple passes at me. Quite close. It probably circled 6-7 times, then struck out for San Miguel Island, w/ several agitated gulls in tow.

Caught 2 female gulls - 293, 294

May 20, 1988

Slept poorly last night. The wind picked up - rocked the boat an awful lot - causing it to pull on the anchor chain which ~~was~~ consequently made a loud "thwack" each time. ~~to~~ Dwight caught us some abalone & scallops, which we feasted on last night - what a consolation! The boat anchored at a cove <sup>Taylor</sup> harbor just across from Prince Island, to the lee of San Miguel. We were up at 06:15. Randy offered to take me to Prince in the anon, but Dave said it would be better to wait - nevertheless after some confusion, I was taken over to Prince. Began trapping by about 0830. Captured mate - #295 to bird caught yesterday 294. Also caught another gull ♀ 296. Two more gulls caught 297, 298.

We off-loaded from the island by about noon.

On The trip back took us along the north side of Santa Rosa Island, south side of Santa Cruz Island, where we circled Gull island, and thence to

Returned to Ventura by 17:00. I stopped in at U.C. Anacapa. Santa Barbara to see John Endler & wife Tracy.





Humboldt County, Phelps Ranch

Gardenville Peregrine Eyrie - update: <sup>April</sup> ~~May~~ 28 to May 4, 1988

On May 28th Matt Nixon headed down to Diablo Canyon (SLO County) to place 2 two-week old chicks in the eyrie. As it turned out, the peregrines had long abandoned this site. The dummy eggs were cold, so they turned around & headed for Gardenville to put these two chicks in. Drove through the night, met Todd who brought Matt in to the Ranch. They arrived at Goat Rock in the early morning. Matt got the ropes set up, then climbed down. The female was scared off the ledge & put up a huge defense - all by herself. Male nowhere in sight. Matt had trouble with the ropes, couldn't make it to the ledge, had to return to top, straighten things out & go back down. Finally succeeded in placing chicks in eyrie, but only after keeping the female agitated for a couple hours, alone. After that, Matt watched the cliff from afar - the male showed up, flew to ledge, showed interest in young. He apparently obtained food twice for the female, but she was not interested in feeding the chicks. In fact, she avoided the ledge, maybe only sat on it once. After several hours, Matt climbed in, took the young back out, replaced with dummy eggs. The two chicks went to the eyrie at Ballard's, Napa, the next day, and were accepted right off. On May 4, Matt brought a younged (1 week) hybrid falcon chick to Goat Rock and placed it in the nest ledge, but the falcons had not been around the rock much, so he had to take it back out.

## Goat Rock Summary:

March 27 - climbed all potholes - no eggs.

April 6 - ~~three the~~

Three eggs taken from large pothole,  
2 dummy eggs replaced.

April 29 - 2 2½ week old chicks placed in eggie,  
& put up major defense; kept agitated for  
maybe 2 hours. Chicks not accepted.

of the 3 eggs taken, 2 died during incubation  
in incubator, 1 chick hatched, but is very weak.



23 May, 1988

Maren and I left Berkeley at 13:30, drove 101 north to 128, then the latter route over to Highway 1. In spite of several stops and lots of roadwork, we arrived in Mendocino by 16:30. We first stopped in at Clara Spring's ranchhouse to say ~~high~~ hello.

• They are cleaning up a couple rooms in the house, unpacking a lot of Mrs. [ ] painted pottery. The front room is just gorgeous - thick wood-beam ceilings, fireplace, etc. Their lettuce operation is doing well - last year they 15,000 heads. Alan has been doing a lot of the planting. Visited with Clara until 18:00. She showed us lots of pictures - including ones of the fishing boat rescue (1981). Maren and I then went into the town. Ate at Dick's Bar. Barn Swallows + Ospreys (2) visible from the window. Went down to the mouth of Big River. Saw Green-herons, Kingfishers, Purple Martins (6) - fledged young, cliff swallows, Surf Scoters. On rock just north of the river mouth about 14 Pelagic Cormorants were nesting. White-crowns abound. For sunset we went out to the Headlands - Savannah Sparrow bathed in a pool next to us as we sat behind a rock for wind break. Weather was like winter - high winds - very rough seas. On rock off the headlands counted about 7 Pelagic Cormorant-nests and ca. 60 Brandt's Cormorants (including 1/2-grown young). About 8 WG nests.

Goat Island.





24 May 1988

We camped at Van Damme State Park. ~~H~~ Sawinson Thrush, Robins, House Wrens, Chestnut-backed Chickadee, ~~Pigeon~~ Pigeon Nuthatch (family), Stellar's jays, Red-tail (begging imm), juncos. After breakfast we headed out to the Spring property inbetween both units of Van Damme State Park. Drove out to the bluffs. Collected 6 gulls - DAB 299-304. 299 was the male of a pair nesting on a small rock just offshore. I unfortunately lost the ♀ in the sea - although I tried wading out to the rocks where she beached. It got simply too deep + cold. Weather is warmer today, less wind. Few clouds. Saw close a couple Ospreys, several Ring-bills passing through. Black-shouldered Kite, Harrier and several Kestrels hunting over the Spring's pastures. Starlings, Red-wings, possible Horned Lark. Counted 61 gulls on offshore rock at Van Damme State Park. → Van Damme Cove.

25 May 1988

After breakfast in Mendocino we drove back to Van Damme St. Park, packed our things. Heard an immature Red-Tail begging for food. Northern Flickers nesting nearby. A robin was alarmed about something which turned out to be a Canada Jay! After packing we drove back out to the Spring ranch. A pair of ospreys were hunting the bluffs again, as were harriers, turkey vultures. Several Sawinson Sparrows in pasture vegetation.





25 May 1988

I searched for the gull I had lost yesterday. Found it on the beach - dead, breast meat completely eaten. But the breast was removed through a small hole picked in the skin - seems to suggest a turkey vulture had cleaned it. I collected the gull - OAB 305 - which was the mate of 299.

We drove route 1 to 101 (Leggett) then north on 101 to the Ferndale turnoff out of Rio Dell. It took us 3 hours to get to Ferndale from Mendocino. Long drive along wavy roads. Weather is sunny, warm, even on the route from Ferndale to Cape Mendocino. We went to Ocean House, saw Jerry who said it would be OK to drive down to the beach just south of Sugarloaf Rock. This we did. I immediately set about gull collecting. Shot 5 gulls in quick succession (OAB 306-310). Maren set up camp. I prepared the gulls. Finished by about 20:00. The ocean got very calm. Lots of gulls and even cormorants soaring about Sugarloaf. A few Puffins visible through the scope. Counted 141 gulls from the southeast perspective of the rock. Several bands of Brown Pelicans cruising past the beach - all going north. Maren found a white-crown Sparrow nest 4/4 eggs - in bush over small wash/ravine, near beach.





May 26, 1988

We were up by 07:00. Viewed Sugarloaf rock from our camp - could see Tufted Puffins, Cormorant and Pigeon Guillemots circling around. Counted about 10 puffins. No sign of Peregrines. I finished preparing the gulls by noon. We then drove back to the ranch house, said goodby to Jenny. We went south about  $1\frac{1}{2}$  miles to the large "flatiron" rock <sup>Steamboat Rock.</sup> sitting  $\frac{1}{4}$  mile offshore. Lots of murres (+300), Brandt's cormorants (+60) and a few gulls (13) nesting. Some Brown Pelicans. Four Black Brant were foraging in the surf - beautiful geese! We then drove out to the old (1868) Cape Mendocino Lighthouse - which stood on about 50' higher than Sugarloaf and gave us a good view of the rock which was about  $\frac{1}{4}$  mile away. We watched it through the scope closely for  $1\frac{1}{2}$  hours. Lots of Pigeon Guillemots, Cormorants (Pelagic, Brandt's, Double Crested) - the Pelagics were scattered about in individual nests, the Brandt's are on a small colony area on a NE slope, about  $\frac{2}{3}$  way down from rock crest. The Double-crested are nesting on the very top - probably 20 nests. Lots of <sup>Stellar</sup> sea lions on beach below (>300). <sup>Scattered Calif. Sea Lions + Harbor Seals</sup> No sign of Peregrines. There is a good rock at the next point north - where Bear River flows out. The rock is

2



May 26, 1988

False Cape Rocks

also offshore - potential <sup>2</sup> Penguin spot, especially the south face. Weather still sunny, but front is moving in. at the Cape we saw lots of Lazuli Buntings, American Goldfinches. On trip back to Ferndale - tons of Turkey Vultures, 2 Golden Eagles, quite a few Red-tails. Arrived in Ferndale around 16:00. Went to Plough & Stars for night in Arcata. Saw only 2 Common Nighthawks in Arcata.

May 27, 1988

Out to shoot gulls off Trinidad Head. \$30.<sup>00</sup>  
 Dan Cox (Boat - Express - crabber) 677-3288  
 PO Box 226 Trinidad - took me out to <sup>Prisoner</sup> Bald  
<sup>Rock</sup> Rock - about 1/4 mile south of Trinidad Head.  
 Small colony of Murre on top (50); 17 resting  
 Brown Pelicans. Collected 6 gulls - all males  
 DAB 311-316. This rock is known as Prisoner  
 Rock. <sup>Trip lasted from 9:30 - 10:30.</sup> Prepared gulls at HSU Marine Lab (technicians  
 Audrey, Lee). Worked on gulls from 11:00 - 14:30. Then set  
 up camp at Patricks Point State Park. Clouds moving in;  
 back to Trinidad, hiked the head from about 16:00 - 18:00.  
 Rufous-hummers abound. As do American Goldfinches,  
 Wrentits, Purple Finches - pair seen & heard alternating  
 songs. Very rough water out in exposed portions. Pigeon,  
 Pelagic Cormorants on sea cliffs of head. Couple gull pairs  
 too. Song Sparrows, small flock of Cedar Waxwings.





May 27, 1988

64

On Blank Rock - due west of Trinidad Head, counted about ~~64~~ gulls - each one likely a nest. My perspective was limited by the to the eastern side of Blank Rock. Business Rock, as viewed on its northern side, revealed 24 nests of W. Gulls. In Trinidad Harbor nearly every small rock has a pair of gulls; even a boat had a nest in its bow with 1 egg. The big rock next to Trinidad Pier has 3-4 gull nests on its south face. Observed a 3-year Glaucous-winged Gull at Trinidad Harbor, several double-crested cormorants, ~~BB~~ Belted Kingfisher. Towards sunset 3 river otters appeared - they played on the lower docks. Two chased each other around and through a kelp. The water in the bay was very rough - hardest I've ever seen it. Towards evening Maren and I went back to Patrick's Point State Park & walked Agate Beach. No whales this year! Varied Thrush, ~~B~~ Swainson's Thrasher, Robins abound in the park. Barn & Rough-winged Swallows along the Bluffs at Agate Beach. Many Song Sparrows.

May 28, 1988

Rain - last night and this morning. Heavy downpour - our tent became soaked. We packed up after breakfast in Trinidad. Drove to Auwahi State Reserve, then out to Blue Lake, back to Arcata just in time for the start of the Kinetic Sculpture Race. Still raining! We then went to Eureka to pick up money at Autoteller and head south. But we discovered Maren lost her





May 28, 1988

sunglasses. We figured they must be on Trinidad Head, so we drove back - hiked the head again. Sure enough, found them where she had photographed flowers!

The sky was ~~de~~ clearing up. Large numbers of Pigeon Guillemots & Common Murres were foraging in the waters off the head. Saw 2 Brown-Headed Cowbirds - I was wondering where they were yesterday.

We drove south. Arrived at the Cliffs of Holmes around 17:00. Watched the cliffs from the opposite river bar (Eel River). Saw a Peregrine sitting atop the huge stump-snag at top of ridge, but by the time I set up the scope no sign of the falcon. Heard one or two begging calls, then silence. Nothing for 15 min. Then, just as we were ready to go I saw

both falcons (adults) come swooping out of the air just in front of us. Both birds did a 100' vertical twisting drop. As the male threw up, the female snatched an object out of the water (dropped bird, by the male? she flew up to a small sitting-spot about 50' above the river & near the hole out of which water drains drains. She "worked" the prey over for less than a minute, then made a bee-line for a spot on the far downstream cliff. She disappeared behind a feathery shrub in a vertical crevasse, the most downstream crevasse of the far cliff. This split runs from the top to nearly the bottom of the cliff. The spot where the female disappeared was about  $\frac{2}{3}$  of the





28 May 1988 Field Notes May 28, 1988

down from the top. She was out of view for about 2-3 minutes, then reappeared to soar up the cliff-face. The male joined her, and the two circled around. The female then landed in the thick snag, male disappeared. It was odd in that we heard no begging or screaming. Possibly the young, if any, were already satiated. Possibly, we just didn't hear screaming from our position. The wind was blowing, and it was misting a bit. Quite cold, too. Amazing, the weather is always rotten here. Or, the birds were unsuccessful & the female just went to the caverns to cache food. Don't really know what the situation is, but the fact that the birds did such a quick food transfer which the falcon carried to the caverns is encouraging. I will have to check back later. The cliff was watched from about 17:00 - 17:25. We then drove off to the Phelps Ranch. As we wound past Goat Rock around 18:50 I did not see any falcons. How sad.

29 May 1988.

Had a great turkey dinner last night with Pam & Todd. Todd & I got up to go pig hunting. Pam decided to come along, so Marv had to babysit the Clayton Phelps.

Todd and I drove up to the log house to get another horse, and Luther drove up. He's a nice old fellow - got his horse & hound out & ready. The hound headed out ~~west~~ <sup>north</sup>, but we wanted to try the ridges west of





29 May 1988

the house first. Rode down to the house, picked up Pam. All four of us rode down to the lower parcels north of Panther Point. At the bottom the dogs picked up the scent of pigs. Lots of howling. Also lots of fresh pig damage on the slopes. We rode fast to try to keep up with the dogs, but the going was tough. We lost the dogs. Luther came over from where he was searching, and we listened real hard - no sound of the dogs. So we thought we could try the areas where the hounds first wanted to go (north). At that point a couple hours had past, so Pam and I decided to head back to the house. Almost forgot - saw a Golden Eagle at Panther Point. And Todd found 6 Mountain-Lion deer-kills at an ~~ambush~~ ambush spot there. As it turns out - later in the day Todd & Luther doubled-back to Panther Point and picked up the dog howling. Todd had to go in on foot up the steep talus slopes to get to the dogs. Frickles had trapped about 14 pigs up on a rocky outcrop. A neighbor, Larry, had heard the dogs and ran up to the pigs, waiting for the "hunters" to arrive. Todd & Larry took aim & fired away. In the ensuing pandemonium only 2 pigs were killed. The pigs charged the dogs and hunters immediately, Todd had to fire at his pig several times before dropping it. They estimate wounding a couple pigs too. In the meantime, Maren and I had left to drive home. Again, I did not see any Peregrines at Goat Rock. However, down at Redway.





29 May 1988

site we could see four (!) beautiful brown falcons sitting in their pothole. The birds were nearly ready to fledge. One bird had scampered a bit away from the pothole, but returned to tie down with a nestmate. 2 birds, each like statues, sat on either side of the hole, heads following every sort of curiosity. I guess there are 2 males and 2 females. I know for sure there is at least one male among the bunch. Only heard sneaking once. Watched the rock for 15 min. Weather <sup>mixed,</sup> sunny, cool.

Farther south, at Squaw Rock, I saw lots of white-wash, especially along the ledge that the falcons nested on last year. But in the time from 17:00 - 17:20 I did not see any falcons whatsoever.





June 7, 1988

Met Tony Huntley (Ornithol Prof - UCSC) and his "crew" of young ladies at the Ano Nuevo State Park/Reserve Kiosk. Had left Berkeley at 06:40, arrived at Ano Nuevo 08:30 - light traffic on the bay bridge today. Phil Thorson was the boat driver - and Gary Strachan, Park Ranger. Gary is a former HSW person (grad '77) and a Birder, as Tony referred to him. Took about  $\frac{1}{2}$  to get to the island, in an 14' Avon w/ 15 HP motor. On Anns Nuevo by around 10:30. Tony showed me the area around the old Light tenders houses, on S end of island, for trapping. Set out 4 rings & 1 walk-in. So far (16:00) have managed to catch 6 gulls - including 2 mated pairs; all off 3 egg nests. Flier (DAB 317-322). It looks like all are L. o. occidentalis, on this island. Tony estimates ca. 350 pairs Western Gulls. Loads of Calif. Sea Lion - smells like the men's restroom at a bus depot! Gulls are thick - nests everywhere. Looks like about  $\frac{1}{2}$  the nests still have eggs, many just hatching; most chicks < 1 week old. Pigeon Guillemots, oystercatchers, Cassin's Auklets & Rhino. Auklets nest here. Also House Finches, Starlings & Barn Swallows. About 30-40 Brown Pelicans lulling about. Elephant Seals litter the eastern beaches





June 10, 1988

On Red Rock Island with Michael Fawcett and Jim Roth from the UC Richmond Field Station. Weather is clear, sunny, medium wind. We drove 14' aluminium skiff w/25 hp motor. Landed on the NE beach - which directly faces the Richmond-San Rafael bridge. Very calm on this side since it is protected from the prevailing winds. About 40 gulls are resting in a "club" on the beach. Several nests w/eggs or chicks also on beach - right at high tide line. The gulls are surprisingly tame - they go back on their nests within 20' of us. I started exploring the island + counting gulls (see survey sheet next page). At NE end of island one can walk through a spalt in the rocks to the north beach. The NE slope is steep, w/ mostly shrubs and poison oak. In contrast, the N + W slopes are sheer cliffs, about 40-80 feet in height. On ledges and grassy outcrops gulls also nesting. Counted 8 dead gull chicks at the base of the cliffs. In N face is a cave that leads deep into the rock. I followed it for 20 feet, but stopped after I couldn't see any more. Jim + Michael explored it with flashlight - they said it went back very far, opened up into a large cavern 15' high (?), and then dropped off steep. Bizarre! I think there may be white-throated swifts nesting in this and similar cliffs - saw at various times up to 8 swifts flying above the island. The NW slope is the sheepest in cliffs - very nice. At SW + slope there are many loose rock "washers." I clambered up one of these to the top. The air literally filled with gulls. The top of Red Rock is quite spacious, and has variably-steep slopes on all sides. The W + NW slopes on top are open +





June 10, 1988

grassy. A few rocky outcrops and ledges increase the surface area. Here are ~~some~~ many gull nests. While counting chicks I scared up a large Canada Goose - it flew out of a spalt between two rock outcrops. At the back of the spalt, nestled by 3 rock-faces, was a large ♀ Canada Goose sitting on her nest. She did not spook, but remained sitting. This was a nice spot for a nest - I bet peregrines used to nest in this spalt. Probably measured 15' long x 3' wide, opened to a rocky cliff. The NE + E top slopes are fairly covered in low brush. The N + S tops have scattered Monterey Pine + Cypress trees - found a Black-crowned Night heron nest w/ 3 chicks + 1 egg (light blue) in a So. cypress. The whole southern slope of the rock is good, more gentle. Lots of gull nests here. Much poison oak farther down. Counted about 19 B-C Night Herons in the low bushes here. Saw 9 Double-crested Cormorants feeding in waters off this slope. The island has many small mammal burrows. Michael saw a ~~sk~~ Scleroperous lizard. The soil is quite dry, all grass brown in spite of our late rains this year. See survey sheet - I counted 144 definite gull nests, covered probably 70% of gull nesting habitat. I estimate, then, probably 200 Western Gull nests for this island, a conservative estimate. Trapped one gull (OAB 323) off 3 egg nest, shot 4 birds → one shot took out a pair of gulls at a nest (324, 325) which I discovered unfortunately had 2 chicks. Shot another fly-by gull 326, and one off a 3 egg nest, 327.





Red Rock Island, San Francisco, Contra Costa & Marin Counties, Calif.

June 10, 1988

	NE BEACH	N. Cliffs	SW Cliffs	EAST South Face	Top	<del>Beach</del>	E Beach	Totals
EGGS	3E							10
	2E							3
	1E							3
CHICKS	3C							30
	2C							29
	1C							4
EGG	2E+1C							
	1E+2C							2
	1E+1C							1
Nests		14	6	1 + 28				62
E?			1					
C?		15	12	47			4	
Other counts	13 BCNH 9 Nests.		1 pair Canada Geese + nest incubating	5 BCNH - 40 sitting gulls 6 OCC.	40 Flying Gulls 200 Flying Gulls 1 BCNH nest - 3 c 1e		19 BCNH	144 Gull Nests





June 12, 1988

Left Berkeley at 18:00, going north on HWY 101. Exactly 96.4 miles later I stopped at Squaw Rock to look for the peregrines. 20:00 - after watching the rock for only a few minutes, the tiercel came into view out of the NW. He arced across the rock face in long swoop, then landed on a small ~~rock~~ rock to the left and below of the nesting ledge. It looked like he was holding a chunk of small bird in his st. foot, but the next minute he wasn't holding it anymore. I didn't see him eat it, so I might have just missed seeing him cache it in the corner. The tiercel is on a well-protected and overhanging ~~rock~~ rock that is walled on 2 sides by cliff face. He preened his shoulder a bit, then looked around at some of the swallows flying by. Seems to be quite relaxed. I hiked up the opposite slope a ways to get a better view of the nest ledge. It looks good for all the experience & white-wash. Do they have young? The falcon flew into view and landed on a ledge to the right and ~~below~~ <sup>below</sup> the nest ledge. No sound of begging young. ♀ sneezing. The male's back is to me - he looks very dark, especially the head. Malar stripe present as a "cap". His cere & feet are deep yellow - breast appears very "clean". The female as looks dark, but her soft parts are duller yellow. Watched these two sitting on their respective rocks until 21:00. No other activity seen. It is encouraging that they are roosting so close to the nest ledge. Talked to Monty Kimer (B.C.M.) over





12 June 1988

phone when I got to Hopland. He said it's a bad year for peregrines. Of the 45 nests he is watching, about 20 have failed. Squaw Rock has no young - it failed. They even removed an added egg from this sight. Scotia Bluffs failed this year, as well as Anchor Bay. How depressing. They think it's due to KELTHANE (200T's) use. Falcons near agricultural valleys are failing again. Vineyard use of KELTHANE is also high. The wildlife people are trying to get an injunction against its use. The situation might only get worse. Monty also said that life-spans at an eyrie are short - ca. 5 years for ♀♀. I drove on to the Eel River at Holmer. Camped on the river bar.

13 June 1988

Up at 0600. Walked over to the river cliffs, set up the scope. Saw the ♂ come in from Holmer area flying high, steady. Made direct line for tree on cliff. He sat for a bit, then soared out in front of the cliff circling. The falcon showed up, landed in a snag. As both birds circled in front of the rock I heard begging from possibly 2 birds, eyars(ea)? In the course of the next hour 2 adults were at various times present, then absent. Occasional screaming from young too. At one time the tiercel dove out from his perch in a snag at the top of the rock in a long swooping steep. He disappeared in the direction of Holmer flat, but soon reappeared w/out food. Returned to his perch.

Note:

The falcon (♀) at the Holmes eyrie has an extensive pink tinge to her breast which extends all the way to her chin. The tiercel, in contrast, is white between the mandibles.



13 June 1988 - cont

again he disappeared. After a while I heard screaming from off to the left of the cliffs. An adult falcon (♂?) flew up from that area ~~on~~ while an eyass labored across the cliffs with a "dove" in tow. It ~~was~~ flew up to an isolated fir on the cliff, screaming.

The adult male landed in a tree nearby. Also screamed at a bit. Then I think the eyass flew down across the cliffs to the ledge where I had seen the falcon fly after a food exchange (2 weeks ago). I think I heard more screaming, as if from a second Eyass. The male continued to scream every now and then. He almost seemed agitated about me. After a good while the eyass skimmed across the cliff with a couple "ivings" dangling from its feet. At that point a Stellar's Jay began diving on it. This agitated both adults, they launched out from their ~~spots~~ positions with loud cackling kek-kek-kek calls. The tiercel stoop through the trees at it, landed, then tried again, making a dash at it. ~~but~~ The peregrine tried to stoop/lunge at it. Was quite agile in the trees - like a Cooper's (or so it seemed). The jay gave some napping responses. About 1½ hours had passed, then the tiercel launched out in the direction of Warner flat. He rumped back in a straight line, ~~as~~ long dive for where some horses were galloping. He then threw himself into a vertical twisting stoop of about 70'. I could





13 June 1988 - can't

hear the wind through his wings, then a quick slap. He came up with a small bird. I saw it flying up from the ground as the tiercel went into his stoop. I thin it was something like a sparrow - unusual though. Perhaps just a finch. At any rate, the tiercel took it back to the cliff and, although I lost sight of him, may have transferred it to the ad. ♀. Both birds appeared in the same tree together. No further eggs screaming was heard. Well, at least they have one fledged young - probably tiercel. Left by 0800 for Eureka. 12:00 - 13:00 - wabbed out to the large sea rock/cliff north of Big Lagoon and south of Humboldt Lagoon. Only a few gulls, surf scoters, imm. double-crested cormorants. No falcons.

14:00 - 15:30 - On Split Rock, ss. of Klamath River mouth. No falcons. Here it's warm but some fog too that stops right on the shore. (Forgot to mention - it was warm & pleasant last night at Hobbes - almost no wind. Only river fog in morning, lifting. Also lots of warbling vireos in the poplars (alders). Thickly-overgrown trail to split rock. Good nos. of song sparrows, rufous hummers.

15:30 - 21:00 Drove from Split Rock (So. of Klamath R CA) to Charleston, OR. The southern Oregon coast is spectacular. The rocks, cliffs and sea-stacks are immense - ~~at Cape Jack state~~ state Park lots of gulls (so. of Pistol River). Not a bad place to shoot, either.





13 June 1988

Stopped at Bandon, OR 17:00 - 18:30. Beautiful gull colonies on the rocks just offshore. Counted 165, 65, 60 gull nests, respectively, on the three major rocks North-South. Very windy. Looks like most birds WG. Pelagic Cormorants, Pigeon Guillemots and one Tufted Puffin seen. Many gulls flying by. In fact, I get the impression that the entire OR coast ~~is~~ has gulls flying South  $\rightarrow$  North. Saw 1 perfect GUG fly by at Bandon. Hybrid on the wharf. Spent night in Charleston, at Capt. Jack Motel.

14 June 1988

at Oregon Institute of Marine Biology by 09:15. Met Jan Hodder again. She had just gotten back from a trip to England. The secretary, Marge, helped me make arrangements to stay at the institute. It turns out that classes will start next week, so they are quite busy. Also, Dr. Rudi, the Director, is giving command over to Bob Terwilliger, whom I met in Friday Harbor last summer. Jan called the coast guard to make arrangements for a key to the lighthouse at Cape Arago. MR. Seifried is still in charge at ANT (Aids to Navigation Team) at Charleston. Gave his OK. I went over and picked up the key from MR. Gerry Herbert. Out at the station on Cape Arago Light by 10:45. As last year - lots of gulls on the bridge - many sub adults. On the north end of island there are approx. 15 gull nests - some 7 chicks (1-2 wks old, max), but most still on eggs. This is very gross here. Set trap over a 2 egg nest where I thought a





14 June 1988

Glaucons-winged Gull was dive-bombing me. Caught a ♂ WG (DAB 328) that has a slight sub-adult appearance - touch of brown in coverts, primary tips, some black on tail. Then set trap over 2 egg nest south of the Lighthouse. Caught gorgeous ♀ (DAB 329) WG. Then, surprise, mate of 328 was caught (DAB 330) - it is a hybrid ♀: light back, ± dark P° tips, but lighter than WG's, eye ring pink & yellow, iris grayish. Also caught mate of 329 - DAB 331.

Quite successful. Many WGs here, some sub-adults breeding. Searched the north face of West point for the GWG's of last year. Saw only one bird, at about the same spot as last year, can't tell if it's mated. Pelagic Cormorants on the North face cliffs, Double-crested nesting on the top flat, intermixed w/ gulls. Most incubating. Several Tufted Puffins - real close - soaring past. Pigeon Guillemots. Many Brown Pelicans resting. Weather foggy, calm.

15 June 1988

Picked up the box from Cape Arago Light from Mr. Seifried. Out on the island by 10:00 AM. Set trap out over 3 egg nest near the foghorn. Eggs pipping. Promptly caught the ♀ DAB 332. Weather soaking in. Forgot to mention, yesterday saw 2 GWG on bridge as I was making out, also Belted Kingfisher - probably at nest on earthen cliff beneath roots/trees of mainland. Once again, a good GWG is hanging out at the North face cliff. Also, a good GWG is soaring about the island, concentrating on the area near the foghorn. A further hybrid gull shows up every





15 June 1988

and then - also soaring around. Good wind today, brisk. Brandt's Cormorants are also nesting out on the west peninsula. They are further down than the Double-crested Cormorants. A crow was inspecting the island. Small family groups of House Finches came by. Counted about 150 gulls out on the western peninsula of Cape Arago Lighthouse. Also just noticed a ♂ GWG - dark iris, pinkish eyering, r° tips darker than back, but nevertheless lighter than WG's., sitting on nest at start of west peninsula, north side. The nest is tucked in an earthen ledge, with root support about 1 yard below the cliff top. The cliff top is overgrown. The ♂ GWG has an deep yellow-orange bill, and its eyerings are somewhat defeathered, giving it a "teary" appearance. ~~Then~~ This bird was incubating, but was soon relieved by a ♀ Western Gull - with rather dark irides, otherwise a perfect WG. They switched at the nest, then the male GWG brought back nest material in 2 trips, gave this to the ♀ WG. She rearranged nest a bit. This is the GWG that I have seen soaring near here. Watching it soar and gather more nest material above the rope. Its r° tips are indeed very light - only a few shades darker than its back. Next to the ♀ WG its back looks very light, and its bill is duller in color, not as deep orange as that of its WG mate. Definitely dark irides. Fantastic! By the way, I put the pipping eggs from the trapped into 2 other nests - one went in a 2 egg nest, and two eggs went into a one-egg nest that I actually tried to





June 15, 1988 - cont.

trap off of yesterday. The adults didn't seem too desperate to incubate their one egg. But now, with audible peeps from the one hatching egg and the other just pipping, the ♀ is glued to her nest.

The male GWG has been coming back to the nest with material. It has also been sitting up on the top of the island above its nest. Did an aggressive up-right towards 2 other ♂ WGs. Some grass pulling. Another GWG came by, tried to land near it, but was threatened off by the GWG.

Left the island at ~~14~~ 14:50. On my way out over the bridge I scared up 2 GWG amongst the 45-odd Westerns resting on the bridge.

In the evening I drove out to Whiskey Run Beach which is located about mid-way between Cape Arago and Bandon, OR. The beach itself had a number of sub-adult Western Gulls, a few adults, and some sub-adult Ring-billed Gulls bathing and resting on a creek-outflow. The beach was too crowded for shooting. I drove out a sandy road just south of the beach access. Only made it a few 100 yds, so I walked on parallel to the beach. Lots of gulls are moving north along the escarpment at dune-level.

Strong NW wind, mist, fog, visibility ~ 10-5 miles, depending on wind. Weird dunes - the escarpment is about 150' high, behind it are dunes covered in a thick mat of green, thorny low bush. White-crowns<sup>Am</sup>, Goldfinches, a Mourning Dove, Wrentits, Crows, Marsh Harriers seen. I found a

10

—



June 15, 1988

good spot where the gulls going north pass just over/overhead. Good view of Banden Islands about 10 miles distant. Waited at this lookout from 19:00 - 20:00 hours. Hoped to land a Glaucous-winged Gull, but only Westerns came by. Quite a few ad. males w/ full crops. Probably a total of 80 birds passed, some going north, some south. Saw what I think to be a Marbled Murrelet making a bee-line for the ocean. It came from inland, behind me, passed straight out to sea. Small, dingy dark bird, probably slightly larger than a Cassin's Auklet, closer in size to a Rhinoceros Auklet. It was quite distant.

June 16, 1988

To 15:00 - took care of 6 gulls, laundry, etc.

15:30 - 16:45 - went out to Cape Arago State Park. Counted gulls passing: 20 ad. WG's in course of 45 min. Out by Simpson reef loads of Common Murres, several Loons (common?), Cormorants, gulls feeding. Watched 2 Cormorants, 3 Common Murres & about 12 gulls feeding. The cormorants were right amongst gulls - would dive, gulls also would jab at the water. No aggression between corms & gulls, Murres seemed to stay on perimeter of flock. Young corms in park. Lots of Barn Swallows, a few Oystercatchers. Saw one sub-ad. GWW. Lewis Woodpecker on pole.

I drove over to north end of Charleston Harbor - out the <sup>breakwater</sup> levee road that parallels Coos Bay entrance. This is the ~~levee~~ breakwater road that starts at the ANI Coast Guard Station/Housing. On the navigation tower closest to





June 16, 1988

Coast Guard housing, but still out in the water, is a gull nest. First saw a very Glaucous-winged Gull type sitting on it. When I came back to this area an hour later, a Western type was on the nest, and the GWC-type was standing nearby. The bird on the nest was the ♂. It looked pretty good for Western Gull, the ♀ type were about 1 shade lighter than a pure Western, its irides were darkish and through the scope it seemed to have yellowish eyering. The ♀ GWC-type made many short flights from the tower to first forage, then further in surrounding areas. She foraged quite close to the tower. Even came in to my bread (was going to try to trap her). Very wary gulls here - they don't just come in for bread if one stands too close. She, and several subadults, didn't come in until I left the beach. The ♀ has primaries that, when she's sitting in shade, look 3 times darker than her vent, but in light, or flying, they look only 1 ~~shade~~ shade darker. Her eyering looks deep purple. Irides are clear light slate. Her back is light. In fact, she's probably very similar to the bird I caught. Also saw another GWC type flying about this area - large male w/ ratty wings.

Pete Lawren

265-7839

1206 NW Abbey  
Newport, OR

Jerry Butler

hm 444-2241

503

867-4741

23 Camp 12 4p  
Toledo, OR

Project Leader  
Marine Rec. Fisheries  
Dept. F & W.  
Marine Science Div.  
Newport, OR

So. → Thru 2 lights Hospital Bay

97365

Left on Abbey.

Past Hospital → up steep hill off to left,  
crest of hill 1206 NW Abbey

'66 Volvo Cargo van  
Right.

Dale Melton

Newport city Police

Newport, OR 97365

503-265-5331



June 17, 1988

Left Charleston around 10:15 this morning - heading north to Newport.

At Sealion Caves, 1 mi. S Haceta Head. On the slope below Sealion Caves, from the lookout north of it, I counted 101 gulls - all Westerns. This slope is steep, grassy, blends into rock, guano-covered, further down it consists of rock. Right below the first turnout is a small ridge w/ 2 gull nests - one nest has ♀ WG and ♂ WG/h? which has worn  $\rho^{\circ}$  tips - makes them look slightly brown. Their nest is on a grassy portion. A small rock island south of turnout had 11 WG's.

at Haceta Head 13:00 - 14:00. 2 large rocks just offshore, the farthest one out is mostly rock, dirt, bare-topped. This rock has dense Double-crested Cormorant colony (80) on top, mixed by Brandt's Cormorants. Counted 90 nesting Western Gulls, 1 pair had brownish  $\rho^{\circ}$  tips, 4 isolated brownish-tips (these basically look like adult birds but have faded black/brownish tips. 1 hybrid ♂ + 1 WG ♀ with slightly brownish tips seemed to be associated, but did not appear to have a nest. The hybrid ♂ was threatening agg. upright to a WG ♂ w/ nest. This area was entirely rocky. Lots of Cormorants nesting. The other rock, closest to shore, is topped w/ a few trees + has grass up its N + NE slopes. 71 WG's nestings, 4 brown-tipped gulls resting and 1 hybrid ♂, not nesting but in amongst nesting WG's. On the shore below lighthouse counted 8 WG nests + 1 nest with ♂ WG, ♀ Hybrid.





June 17, 1988

arrived in Newport <sup>OR</sup> 15:10. Made arrangements with Pam Rogers for a key to Lab at OSU Hatfield Marine Science Center. Ms. Rogers is secretary to the director. Went to the dump, but found out I could no longer shoot there due to liabilities. Bummer! Called Roy Lowe (USF&WS), but he's too busy to take me out. They're doing a sealine survey of the Oregon coast. They sound really concerned about disturbance at cormorant/murre colonies, claim that the presence of their boat causes birds to stand up off nests, whereupon Ravens rob their eggs. Sounds extreme. Checked in at the Youth Hostel. Had dinner at local Italian place - met Pete Lawson & wife & son - a statistician at OSU Lab. Did work on Peregrines in Texas, Mexico. Found 6 eyries in NE Mexico w/in 12 km, good reproduction. Oh yes, Roy Lowe said Oregon now has 9 pairs of Peregrines - only one on the coast up North. Last year they laid, but failed, this year they were at cliff but did not lay. Anyway, Pete Lawson set me in touch with Jerry Butler who'll check for boat rides tomorrow.

June 18, 1988

Someone broke into my car last night while it was parked at the Newport Youth Hostel. Must have happened zw. 10:30 pm - 9:00 am. Only took my Marine Radio.

13:00 - at OSU Lab waterfront - checking gulls. On piling just off from the waste treatment dock, 1 nest w/ pair



Navigation pile : ♂ WG X WG ? (♀) -

0

● - WG X WG

Yaguina Bay

Fisheries

⊗ - ♀ WG - eggs

♂  $\frac{WG}{H}$  - but slightly lighter - P tips  
greenish irides

- dull yellow eyering, possible pinkish hue dorsally.  
- voice "higher".

Treatment  
plant

Waste  
Plant  
Pier

⊗ Pile - WG X WG - both lt. ~~irides~~ irides  
Yellow eye-rings

OSU Dock

⊗ Pile - WG X WG

♂  $\frac{H}{WG}$  - dark green irides, yellow-flesh-pink eyering; P tips grey on trailing

⊗ -

(?) ♀ WG

WG

⊗ -

June 18, 1988

of good WG's. Nest w/ small chicks. Surf Scoter, Pigeon Guillemots in water. Another nest w/ pair of WG's on flat pier to north: ♀ WG ♂ WG but slightly lighter-eyring possibly pinkish hue dorsally, greenish irides. tips: incubating. Two more nests on pilings - all WG x WG. Another nest w/ chicks on pile south of OSU dock - ♂ has WG features, but trailing edges of P<sup>o</sup> tips are grey, eyering yellowish-pinkish, iris dk. greenish. ♀ may be a WG sitting nearby. Another nest on southern navigation tower. Total 7 gull nests for the waterfront by OSU Marine Lab, Yaquina Bay.

~~June~~ 15:30<sup>17:30</sup> - at Yaquina Head.

- 1) For thin loaf-like rock just offshore from SE cone of Yaquina Head 15 gull nests visible, all WG x WG except one which has hybrid ♂ (light P<sup>o</sup> tips, but still darker than ~~dark mantle~~ mantle, dark irides, possibly flesh eyering) and WG ♀ that tends toward Hybrid status - has faded trailing edges of P<sup>o</sup>'s, especially 7, 6, 5. Otherwise normal WG. The hybrid nest is on top of the rock at level area - grassy. Hybrid pair copulated, have week old chicks. <sup>About 42 nests have chicks.</sup>
- 2) on SE slope closest to above rock - 4 gull nests; all WG x WG. One pair of which has light irides. A Hyb. ♀ landed in between 2 gull nests - her P<sup>o</sup>'s are lighter than WG due to fading & wear + less pigment. Other than that, she has light yellow eyering + light greenish irides.





June 18, 1988

Yaquina Head - OR

- 4) On SE-E Slope of southern peninsula of head staff: 29 nests  
One of which is hybrid ♂; Hybrid ♀ (WG), located atop the  
peninsula, on a grassy tussack.
  - 5) Directly in front obs. platform, on mainland. 4 nests right  
in front. One has hybrid ♂ (very close to WG type) - ~~light~~ <sup>lighter</sup> ~~tips~~  
<sup>tips</sup> slightly lighter <sup>P°</sup> tips, flesh-pink eyering, dark pigmented  
iris). Incubating. Nest on worn grassy top.
  - 6) Next closest rock out from obs. platform - 7 WG nests.
  - 7) Outermost rock 17 WG nests (hundreds Murres, Brandts  
Cormorants).
  - 8) Rock just SW of point: 23 nests; H ♀, ♂ WG fighting  
off other gulls, <sup>choking</sup> ~~choking~~ together.
- On fence I counted 6 WG, 1 Hyb (light eyering), 1 GWG (pink  
eyering & dark iris) and another Hyb (pink eyering, darker <sup>P°</sup> tips).
- 18:30 - 19:05 Tried trapping on beach at OSU dock area - no  
luck. Gulls too wary of trap rigs.
- 19:40 - : Back at Yaquina Head. Walked out to  
area behind first part of quarry. Nest of Western Gulls  
on ridge top. Counted 14 WG, 2 Hyb & 1 GW soaring above  
me. The weather has really mellowed out - was hot and  
sunny this afternoon. It is now moderately windy, but  
not bad.

June 19, 1988

Down at dock of Newport by 0800 - weather clear,  
sunny, wind picking up. No boats found to go out  
with. Ate breakfast, then drove up to the bridge.





June 19, 1988

~~There~~ The men are still painting it - they were doing this last year too. Walked out on the bridge to count gull nests. One bridge worker said they had removed gull eggs from bridge & put them under chickens. I counted nests on pilings below and tried to determine morphotypes - most look like WG's. One gull was dead, hanging from 50 feet of fishing line which got caught in an overhead wire.

Drove from Newport to Tallamook Bay, over 3 Capes scenic route (Cape Kiwanda, Lookout & Mearns). The three-Capes route took only 29 minutes to get to the Bay. Promptly saw a Glaucous-wing Gull fly overhead.

14:40 - at ~~collecting~~ collecting spot on peninsula. Today is Sunday - and it's crowded out here. Just too many people - how utterly frustrating! Perfect day for collecting, strong wind, clear, sunny. Gulls are skinning the dune tops. Tried to set up to shoot, but people kept coming by. Over about 1 1/2 hours counted roughly 146 adult Western Gulls: 9 adult Glaucous-winged Gulls: 4 adult Hybrid Gulls. In addition, probably another 8 sub-adult Glaucous-wings and 8 sub-ad. hybrids flew past (by subadult I am counting 3/4 year old birds that are nearly ad. in plumage. Probably 40 such Westerns flew past. One ad. pair of Glaucous-wings flew past together, included in the above total, and one ad. w/ 2 subadults. Many Song Sparrows on





June 19, 1988

the dunes of Tillamook Spit. <sup>OR</sup> Black-capped Chickadee (2 ad. males singing), Armenian Goldfinches, Northern Flicker. Large rafts of Ring-billed Gulls resting on the mud flats (40-50 birds). Shot at one gull with 410 #6 ammo - but did not drop it - did hit it though. There's are simply too many people out here today for safe collecting. What a damn shame. Saw another couple Glaucous-winged Gulls up near Cannon Beach, OR. Arrived Astoria around 20:00. Drove on to the Youth Hostel at Fort Columbia; Phil Owen, the Texan, is still there from last year. He offered to let me stay for free tonight. PS - 2 sub ad. Herring Gulls seen at Tillamook Spit.

June 20, 1988

Was down at Chinook Harbor by 08:45. <sup>WA</sup> No sign of Glenn Eager yet. He came in around 9:30. The lady at the Marine Supply place remembered me right off. Anyway, Glenn agreed to let me take the skiff out to East Sand Island until Thursday. His helper, Dan, is on vacation. I got everything loaded up and departed around 11:30, maybe 12:00. Low tide was at 11:23, so I did not get far; as soon as I left the channel I stalled the outboard when it ran into a sandbar. Tried restarting it, but that only made matters worse, I think. The starter cord is nearly out of the motor! Resorted to rowing, then pulling the boat around the sand banks. It took about 2 hours to get the boat over to the pilings - area where





June 20, 1988

I usually camp. I don't know if it's such a good idea to have brought the boat this far around the eastern side of the island. Only time will tell. The wind picked up this afternoon, when I left the harbor few white caps were around, but as I was out near East Sand they increased with the wind which made rowing hard.

Finally had camp set up by 18:00. The weather has changed from sunny to overcast. On my way around the Sand Banks saw 3 widgeon and large nos. (20) of Canada Geese. My immediate impression is that there are more Glaucous-winged Gulls around on the middle-eastern portion of the island.

19:51. Flock of 23 Black Brant landed at sand bar just west of my camp. Double-crested cormorants, 1 Brown Pelican flying about. Total gull count for sweep with scope across Mid section of northern bank of island from camp west to approx. NW end. This includes all visible gulls in territories, and does not include another 240 ~~was~~ or so subadults + hatching adults resting on the beach: 464 gulls (WG + GWG + HYB). Also - large rafts of Double-crested Cormorants resting on the beaches and sandy hillocks of the western end of East Sand Island. The gull nesting habitat varies from low grassy/driftwood to high grass clump/sandy hillocks ~~as~~ on the Northern shore from about mid island (pier pilling + my camp) to the western end. When I moved a bit further out from behind the trees to view the driftwood/bush habitat of the area to the SW





June 20, 1988

of the pines trees / camp area - about 200 gulls took off - leaving nearly as many on the ground. A cursory sweep of a small area for morphotypes revealed 94:18:14 WG:HY:GWG.

A Song Sparrow is singing nicely in the tree next to me.

Caspian Terns rasping their complaints, and squeaking Starlings. Also just heard a Song Sparrow. Barn Swallows too, as well as a Brown-headed Cowbird. A closer count of birds close by reveals same 43:14:9 WG:HY:GWG. It was light until 21:30. Amazing. The clouds/fog moved in - it looks like it might rain. As darkness fell I saw a flock of about 60 Brown Pelicans.

Forgot to mention - I took 2 walk-in traps out to the beach area on south side. Of 3 nests found in the immediate vicinity one had 2 eggs, another 3 eggs, and one 1 chick, 2 eggs. One of these pairs may be GWG's. Nests are in beach sand, disturbed. I walked the south shore eastward to about  $\frac{1}{2}$  way to the higher landfill level. Not many gulls. Indeed, the lower landfill level from the pier eastward is very thickly overgrown - lots of lupine, thistle. Only thing living there are the nutria - their trails & signs are everywhere.

June 21, 1988

On East Sand Island, mouth of Columbia River, Clatsop Co., OR. Thought it rained last night - but it is clear & sunny, even hot this morning. Song Sparrow woke me with singing - has a repertoire of





June 21, 1988

at least three songs. Very nice. Checked the boat out around 07:15. It was above the water line by about 2 yards - so I'll have to move it out with the tide Wed. eve. so the lower morning high tide will still float it. 3 Canada Geese flew up out the marsh near the pier. Counted 25 Greater Scaup.

09:00 Assessing mating types:

♂ WG ♀ WG ~~THH~~ III

♂ WG ♀ H

♂ WG ♀ GWC

♂ GWC ♀ WG

♂ H ♀ WG II

♂ GWC ♀ H I

♂ H ♀ H III

♂ GWC ♀ GWC I+II

♂ H ♀ GWC II

I set out trap rings on 3 nests in sandy beach / driftwood log area, and 2 walk-ins in the grass area west of the trees. This proved to be quite ineffective. The rings did not work well, and the walk-ins were too far away, by the time I showed my face the birds were out of the trap. So I hid in a cement box closer to the traps, and tried jumping out and rushing the traps. The cement box is some ruin left from the pier-fishing days. Barn Swallows nest in it. Well, this worked to catch only one bird PAB(335). Another bird escaped before I could get to it. The colony became quite disturbed. Spent most of the day trying to trap. Around 17:00 I resorted to shooting. Shot 3 gulls (336-338).

27:7:5  
28:8:9  
48:15:12



June 21, 1988

Found an abandoned Canada Goose nest w/eggs underneath the pines near camp. Crows are ~~then~~ less abundant here this year, they aren't nesting in the trees like they did last year. Brown-headed Cowbirds appear to be quite actively searching out nests of Song Sparrows. Starlings are nesting in the old pier pillings.

June 22, 1988

10:00 - Although the colony west of the tree/camp area is quite disturbed by my presence - I'm trying to do a morphotype frequency count: 48:15:12 WG: H:6WG.

Flock of about 30 Calif. Gulls passed overhead. Around 20 Am. Widgeons and a few Mallards are feeding in the mud flats. Counted approx. 50 Double-crested cormorant nests on the high dunes of the west end of the island. Over 250 imm. Double-crested cormorants are resting at that end of East Sand Island.

Between 11:30 and 17:40 I shot 3 more gulls and prepared and measured all 7 birds (includes the 4 from yesterday). DAB 339-341. There was plenty of opportunity to shoot more birds, but I thought it best to get the ones done that I already had "in hand". Of all the Western Gulls (or types) that I've gotten, none seems to exhibit 100% Western traits. The same could be said of the Glaucous-winged Gulls. Perhaps this is true of nearly every bird here. At 17:41 I decided to shoot one more bird. The weather was threatening a bit, it rained this morning, cleared up, and a front

1.



June 22, 1988

was looming on the horizon. Nevertheless, time for one more bird. Easy enough, a GWC (043'342). ~~At~~ Shot, measured, weighed, tissueed and skeletonized this bird in just under an hour.

Record time. Packed the specimens and over half my gear and carried it over to where the boat is tied. The high winds are whipping up the waves and giving it a higher tide than its already high level (7'). Tomorrow's morning tide is 4.8', so I am watching to make sure the boat doesn't come to rest too high up. Sat in the boat from 21:30-22:45 to make sure it went out with the tide a ways. While sitting a tremendous commotion arose from over the west end of the island. All the water birds lifted in while alarming. It was past dusk, but a Bald Eagle was visible, flapping heavily over the island, heading north east towards Chinook. About 20 gulls and a tern in pursuit. It really looked eerie through the failing light.

June 23, 1988

Up at 06:00, broke down camp and loaded up the boat just as the tide was floating the skiff. Had to pole the boat ~~off the island~~ a ways out past the pier pilings to get into deeper water. The outboard started just fine and my ride back to Chinook went well.





June 23, 1988

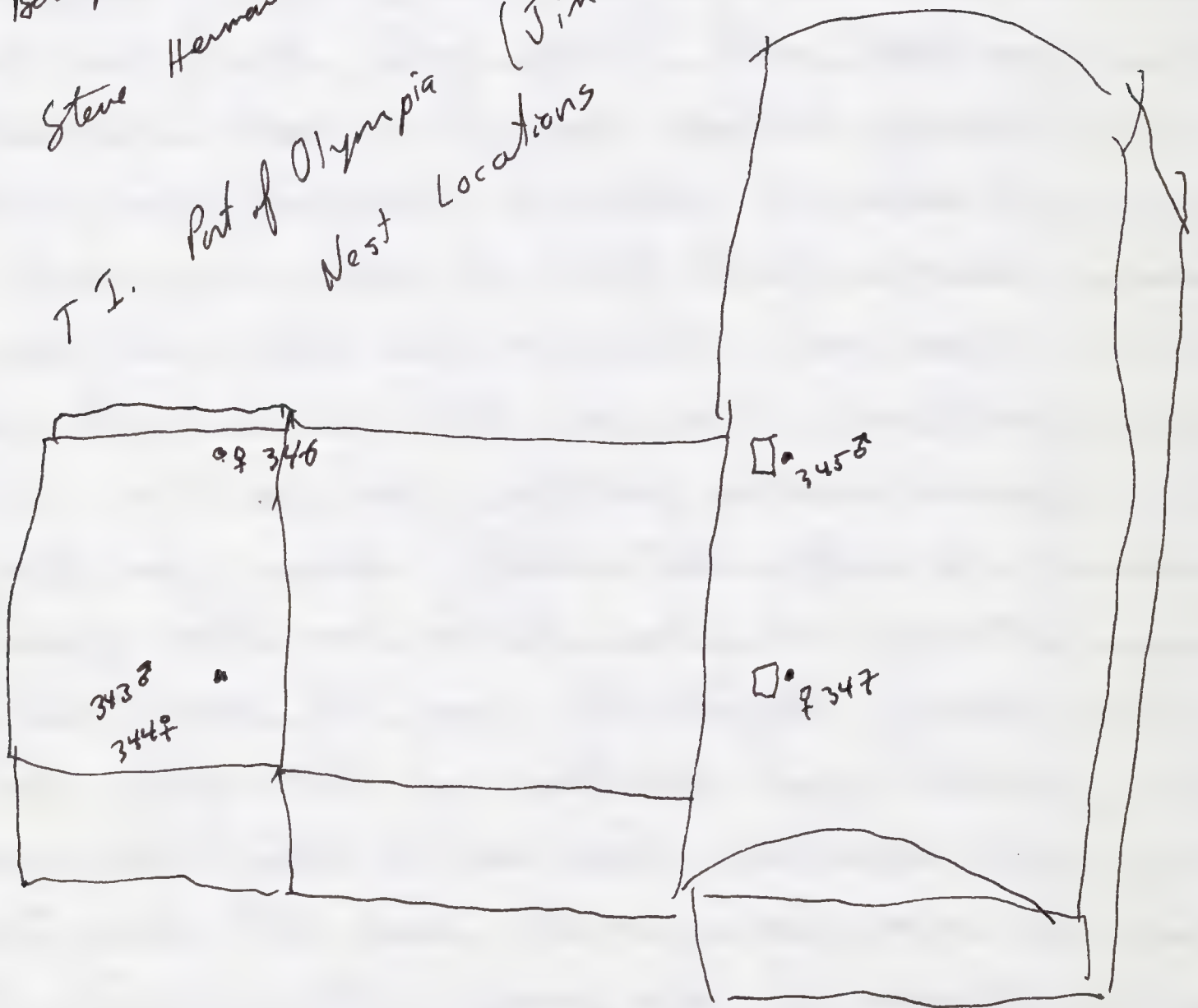
Clouds were thick, and it was threatening to rain. Was in harbor by 08:15. Glenn Eager was there, looking at his small cabin cruiser which had sprung a leak and sunk the day before. I loaded up my car, thanked him, and said goodby. He suggested I get in touch with Harry Taylor, up at East Point Fisheries, Cannery, Willapa Bay for a contact & possible ride. I drove to Astoria for breakfast, then back to Ft. Columbia Youth Hostel to pick up my radio that Maren sent. Phil Owen was there, and was his girlfriend, Tiny, who had "come back" after leaving for her vacation yesterday. Good for him. Then drove on to Willapa Natl Wildlife Refuge. Jim Heidy ~~and~~ (Manager) and Eileen Dunlop were there - greeted me warmly. Unfortunately, my WA permit had not arrived, quite upsetting. I tried calling, but only got secretaries. Found out it hadn't been issued yet. I was fuming mad. Said I'll drive up to Olympia for my permit, which I did. Maren Rohr came into the office at 15:30. We were a bit strained with each other, but I did get the permit. Went directly over to Port of Olympia, and got Mr. Jim Jackson's approval for trapping gulls. In the meantime I made arrangements with Mr. Wayne Morris (Coast Oyster - Willapa) to go out with his crew on Monday (June 26), and Tim Morris (Coast Oyster - Grays Harbor) on Tuesday (June 27). On the 28th &

Bert Gutthausen  
Betty Kutter

Steve Herman

943-5751

T.I. Port of Olympia (Jim Jackson)  
Nest Locations





June 23, 1988

meet Dr. Robert Paine (UW) for a trip to Tatoosh Island. So - things are shaping up. At Port of Olympia Tim Jackson said I should try terminal #1 roof - lots of gulls. I went up there around 18:30 - set out 2 walk-in traps on nests with eggs. One nest w/ 3 eggs and one nest w/ 4 eggs! (Photographed) Went to dinner. Came back, but no luck, birds had not entered traps yet. So I took 'em down, decided to try my noose-rings tomorrow. The Port of Olympia has changed considerably since I was first here several years ago. The field I trapped in then is now a log-staging area. The ~~depp~~ depression-field near the treatment plant is drier, smaller. No more gulls nesting on the ground, just one pole-nester. The roof of Terminal 1 has indeed many gull nests. Every nest seems to be with eggs only. Common Nighthawks above the Port at dusk.

Spent the night at Holly Motel (24.79)

June 24, 1988

10:45 - Set my five noose-ring traps over nests on Terminal-1 roof at Port of Olympia. All 5 nests had 3 eggs each. Weather is hot, sunny. Some ~~wind~~ wind, but not much. Trapped all day.

First time I went up on the roof I caught one male (343<sup>♂</sup>); reset nooses. Next time up two birds were caught (344 ♀ - mate to 343), and 345 ♂. Next time up two more were caught (346 ♀, 347 ♀).

04



June 24, 1988

It looked like the mate of 346 was sitting on the nest while the female lay nearby, dragging her noose rings off the nest. I think I waited too long in going about - generally 1.5-2 hr. intervals. There were lots of gull nests on Terminal 1 roof, especially the higher building & curved roof parts. From an observation platform in the harbor I counted 14 nests. Plus the nests on the flat roof area, 3, and the rest of the building, 10, makes for 27 gull nests. Interesting, that of the five nests I trapped off of, 3 were composed of ~~either~~ dry grass/garbage (plastic, etc.) and 2 were composed of ~~not~~ exclusively moss. Other birds around - crows, white-crowned sparrows, Purple Martins - sing very warbled song.

June 25, 1988

after finishing up with the gulls I did some sound recordings on the Port of Olympia, then drove on to Evergreen State College to deposit birds in freezer. Bert Guttman showed me to the freezer in cold storage room (basement). Also met Betty Kutter. Tried to call Steve Herman 943-5751.

18:00-18:45; at Taholah, WA → last, end of Highway 109 at Quinault Indian Reservation. Went out to beach at mouth of Quinault River. Indians have nets over entire mouth of river - fishermen! Sand-cut rock just North of here & at least cormorants. Counted only 6:3:3 ad. W6:H:6W6 on beach, lots of sub adults. Flock of ca.





Doug Bell

## Boat Charter

June 26, 1988

Received from Doug Bell \$50.<sup>00</sup> for the purpose of transport to Whitcomb Island for gull work. Use of my boat.

KEN WORTHINGTON

*Ken Worthington*

(206) 648-2166

WESTPORT, WASHINGTON





June 25, 1988

60 Common Gulls resting on beach. Couple of Caspian Terns too. Song Sparrows on beach. Barn Swallows + Kingfishers in river. South of Takolah, about 5 miles, are 3 fair-sized offshore rocks and one smaller one, all suitable for seabird nesting. They lie just off Point. The northernmost of these rocks has Double-crested Cormorants nesting (8 nests visible), about 20 loafing imm. D-C Cormorants, loads of Common Murres, most of which appear to be nesting, and, of course, gulls: 5 gull nests visible, 3 of which have WG's incubating on them. On the <sup>mainland</sup> cliffs of the point just across from this rock are another 5 nests: 3 id'd: WG x WG (2) ; HY x HY (1). These nests are on grass, cutbank cliffs. The offshore rock has at least 2 WG x WG and 1 ♂ HY ♀ WG nests. Total gull freq. for rock is 9:3 WG:HY. It is essentially straight-walled rock w/ grassy flat top. The farthest offshore rock, between the other 2 large rocks on a N-S gradient, is the largest - has loads of Cormorants, Common Murres - but I only count 2 gull nests. Too far out for accurate id, but may be both WG. Probably 800-1000 Murres on it. Just saw a Tufted Puffin fly by. Also - Pelagic Cormorants nesting both on onshore cliffs & offshore rocks here. Several crows "hanging around" the rocks. Found one Murre & one Cormorant egg on shore - both eaten. The next rock for breeding is south of the above two, and is a small pillar - it has one WG x WG nest - on rock. The large rock south of

June 26, 1988

Whitcomb Island, Grays Harbor, WA:

Nest Count of SE colony

3 C ~~TH~~ III

2 C ~~TH~~

1 C III

1 E<sub>A</sub> L

3 E ~~TH~~

2 C 1E III

2 E I



June 25, 1988

this has a carpet of Common Murres on top, and only 3 gull nests - two of which are WGXWG. On the way south down Highway 109, about 5 mi. S of Modesto, saw an imm. Bald Eagle sitting on a tall snag right next to the road. This bird looked quite bedraggled, had a mottled white/brown breast. Back of head was wet - almost looked like a vulture's head? Bill black, cere dark.

June 26, 1988

Stayed in the Dorm-motel (\$10.<sup>00</sup>/night). Got ahold of Ken Worthington around 12:30. Agreed to go out to ~~the~~ ~~see~~ Whittomb Island in Grays Harbor at 14:00. Get picked up 19:30.

14:30 On Whitcomb Island. It's really changed since last year. There used to be two dune areas w/ low grass, sort of kidney-bean shaped. There is now a substantial high sandy area to the west & inbetween both dune areas. A large Caspian Tern colony is now in the new area.

South east gull colony:

WG THH ~~THH~~ ~~THH~~ ~~THH~~ ||  
H THH ~~THH~~ THH  
GGG THH HHH

$G \times G \times G : 2$

W6xW6 pairs:  $4+2+3$

$H \times H$  pairs:  $1 + 1 + 1$

$\frac{\sigma W G \times \phi H}{H} : 1$

As I walked through the SE colony counting nests, I estimate a total of 240 gulls were above me.

Also large number of Ring-billed Gulls on area between major gull & tern colonies. Judging from behavior, some may be breeding.





June 26, 1988

19:00 Scanning SE colony - noted 31:10:3 WG:~~H~~:GWC.  
 NW Colony ~~40~~: 57:25:7 WG:H:GWC. In this  
 colony noted another HXH pair and 5 WGXWG pairs.

June 27, 1988

Coast Oyster of South Bend, WA brought me  
 out to Pine Island (Mr. Wayne Morris). Arrived  
 @ 4:45 hrs. Counted 160 agitated gulls in the dim  
 morning light. First check of morphotype reveals  
 35:13:6 WG:~~H~~:GWC. A second check reveals  
 32:20:8 WG:H:GWC. Count of total gulls: 194.

Pairs: 1 WG x 1 H: 1

WG x WG: 11111

1 WG x 1 H: 1

H x H: 1111

Collected five birds (DAB 351-355) on Pine Island  
 (seven shots fired, lost one bird, obtained five).

Occasional Caspian Terns came by. Saw one Western  
 Gull carrying a smaller gull egg in bill. It proceeded  
 to drop it upon landing until broken, then ate it. I  
 almost suspect it was a Ring-billed Gull egg, as  
 these birds are also around Pine Island. Pine  
 Island is very small, its circumference could probably  
 be walked in 15 minutes. The gulls are packed  
 in thick here.

Dave Eris was the boat driver and crew  
 foreman for Coast Oyster today.





## Field Notes

June 28, 1988

Drove to Coast Oyster near Markham (Grays Harbor) for ride out to Goose Island. Tim Morris & Mike from Limn still there from last year. Tim was out with the boat at 08:30. Talked to Mike awhile. They're spraying Sevin on the mud flats again in a month to control Sand Shrimp. Oystering is doing well. Also best crab season in 15 years. ~~Tim~~ Mike had just been operated on - quite sore. Tim returned with crew. Took me out about 09:30. Goose Island appears to be nearly split in two, with a N & S half now. South half had lots of gulls. No time to count, as Tim waited while I shot 4 birds (556-559). About 70 cormorants resting. Also ~~corm~~ Double-crested Cormorants nesting on West end of S Goose Island (~40 nests) and on top of high dunes at N Goose Island (~60 nests). Saw a couple whales, ca. 30 feet in the Harbor - one quite close, head down to eye and tail - very impressive. Gray Whales. Back to Coast Oyster by 11:00. Finished doing gulls by 15:00. Drove to Evergreen St. College to drop off gulls, then ~~on 101~~ back to Aberdeen thence north on 101. 19:00 at Destruction Island viewpoint. Lighthouse and house on island; about 2 miles out. Two good large sea rocks way to the south. To north 4 very large sea stacks and lots of needle-like

## Tatoosh Island,

Main Island: S. End

N End

GWG x GWG	<del>II</del> <del>II</del> III	<del>II</del> <del>II</del> <del>II</del> III
♂ GWG x ♀ H	IIII	II
♂ GWG x ♀ WG		III
H x H	IIII	<del>II</del> <del>II</del> II
♂ H x ♀ GWG	III	II
♂ H x ♀ WG		I
WG x WG	I	
♂ WG x ♀ GWG		I
♂ WG x ♀ H	I	

## Strawberry Is.

GWG x GWG	
♂ GWG x ♀ H	
♂ GWG x ♀ WG	
H x H	
♂ H x ♀ WG	
♂ H x ♀ GWG	I
WG x WG	
♂ WG x ♀ GWG	
♂ WG x ♀ H	

## North I.

GWG x GWG	<del>II</del>
♂ GWG x ♀ H	II
♂ GWG x ♀ WG	
H x H	<del>II</del>
♂ H x ♀ GWG	I
♂ H x ♀ WG	
WG x WG	
♂ WG x ♀ GWG	
♂ WG x ♀ H	



June 28, 1988

islands. Plus some low flat topped, small islands - looks like they might have gulls.

June 29, 1988

Met Bob Paine, Tim Wooten and Ann at Big Salmon, Neah Bay around 11:30. All of the Charter place took us out, w/ Zodiac in tow to Tatoosh Island. Cassin's Auklets, Rhinoceros Auklets, Tufted Puffins, Gulls - mostly Glaucous-winged seen on way out. Also large flock White-winged Scoters. I saw an imm. Bald Eagle over Neah Bay. Landed on Island with the Dory directly. Calm on leeward side. Warm, sunny. Bob Paine gave me a tour of Tatoosh, which incidently, is under jurisdiction of the Makah Indian tribe. The gulls here are very tame. Also got good views of Tufted Puffins.

16:00

- Watching birds, recording voices, noting mating types (see opposite page). Watched from lighthouse tower the south end of island. Then went to north end. Lots of gulls, mostly GWC + hybrids, some Westerns around, but they really approach hybrid morphotype. Watched ♀ GWC beg from 3rd ♂ hybrid. An imm. Bald Eagle flew past north end of island. Later in the evening, we saw an adult Bald





June 29, 1988

Eagle cruise west over the island. I could have sworn I heard an agitated Peregrine from somewhere near the crane-house on north<sup>east</sup> end of the island while I was watching gulls there. Bob Paine has been collecting Peregrine kills in the beach here, said that as many as 3 Rhino Anklets a day ~~were~~ were getting killed by the falcons up to last week or so. They supposedly are nesting on Cape Flattery. Bob has always seen Peregrines here, especially in winter. Winter birds were mostly the "darker" Peales. These nesting falcons are "lighter", he says. They had a very tame, or stupid, sub-adult falcon which they could get within 5 feet or so to photograph.

My first impression of the gulls here is that about  $\frac{1}{2}$  the GWC have darker-tipped primaries. There aren't many westerns here, and of these, very few look like "good" Western Gulls (re: 100% pure).

Nesting Birds: Crows, Violet-green Swallows, <sup>hole in wall</sup> Tree Swallows, <sup>bird box</sup> Cliff Swallows, Barn Swallows, beautiful dark Fox Sparrows, Song Sparrows, Winter Wren. Possibly American Goldfinches. Rufous Hummingbirds, Swifts (White-throated?). Brown-headed Cowbirds.

Bob Paine's Experiment with "hot" (tainted) clams + gulls →

GWG-I ♂

Picked up 1 clam, tasted dropped. Then ate 2 clams, then fish. Then ate 2 more, drinking.

♀ picked up dropped clam.

♂ about 15 min. later coughed up food, near mate and young 3 chicks.

Western ♂ - tried, dropped

GWG ♂ - tried, carried to water, dropped, picked up 2x, dropped.



June 30, 1988

05:30 Bob Paine heard 2 peregrines flying by this morning. I was up and out at the S end of Tatoosh Island to shoot. Collected 5 birds <sup>8 shots, lost one bird</sup> (NAB 360-364).

During the course of shooting an ad. Bald Eagle flew over, first going west, then east. Finished shooting by 09:00. Prepared gulls until 15:30. Note Bob Paine's experiment with tainted clams + feeding gulls.

July 1, 1988

09:00 - 11:30. Went to area on west of island by the cistern to collect gulls. Tried shooting a couple pairs - collected first a male off a 3 egg nest (365), then a female (366) off a 3 egg nest. Waited for mates to settle back down, which only the mate of 366 did. Collected him (367). The female of 365, an intergrade ~~swc~~, was shot, but she rolled off a cliff into the sea. I then proceeded to collect two more gulls (368, 369). Wounded another and missed two. In all, 10 shots for 5 birds.

Bob and Tim saw one of the Peregrines again today, and I found a Rhino-analog kill of one near the cistern.

Have seen a few robins on the island.

Heard the calls of Least Petrel (Melodious - series of notes) and the Fork-tailed Storm Petrel (kee-kee-kee-kee). It rained constantly all day today. By nightfall the soup had thickened which resulted in the Lighthouse casting an eerie light through the mist.

4



July 2, 1988

Today is my sixth anniversary. Come to think of it, I've been away from Maren on 5 of our 6 wedding anniversaries. So ist das. Mum -

08:30 - Went with Ann to the beach area (north end of main island, near the landing booms). Set up trap over 3 egg nest. Promptly caught a ♀ GWC/intergrade (370). It's mate is a little reluctant to go into the trap. Some campers are on the beach which makes things a little uneasy.

Cliff-nesting starlings here at north end.

Frequency count - ~~on~~ north end/beach area main island

GWC ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ||||

H ~~||||~~ ~~||||~~ ~~||||~~ |

WG ||||

Trapping proved ineffective, so I brought out the gun. Collected a pair of gulls with one shot (♀ <sup>371</sup>WG, ♂ <sup>372</sup>GWC), then mate of 370 - a GWC ♂ 373.

all this collecting was done in front of the beach campers. They seemed reasonable though.

Finished collecting gulls around 11:30. Had the birds prepared by around 17:00. The others went fishing for tonight's dinner. I went back to the beach to collect one more gull - preferably a Western-type. One large male with dark po tips kept hanging around a driftwood log just back in the thick grass from the beach. He was there over several days, and must have a nest





July 2, 1988

there. I waited until he calmed down, then collected him with one shot (NAB 374). An unusual gull - dark pink eye rings, CW6 eyes, and very nearly W6 wing tips. Quite a gull! Back at the Winter Palace I skinned the gull for making a skin tomorrow.

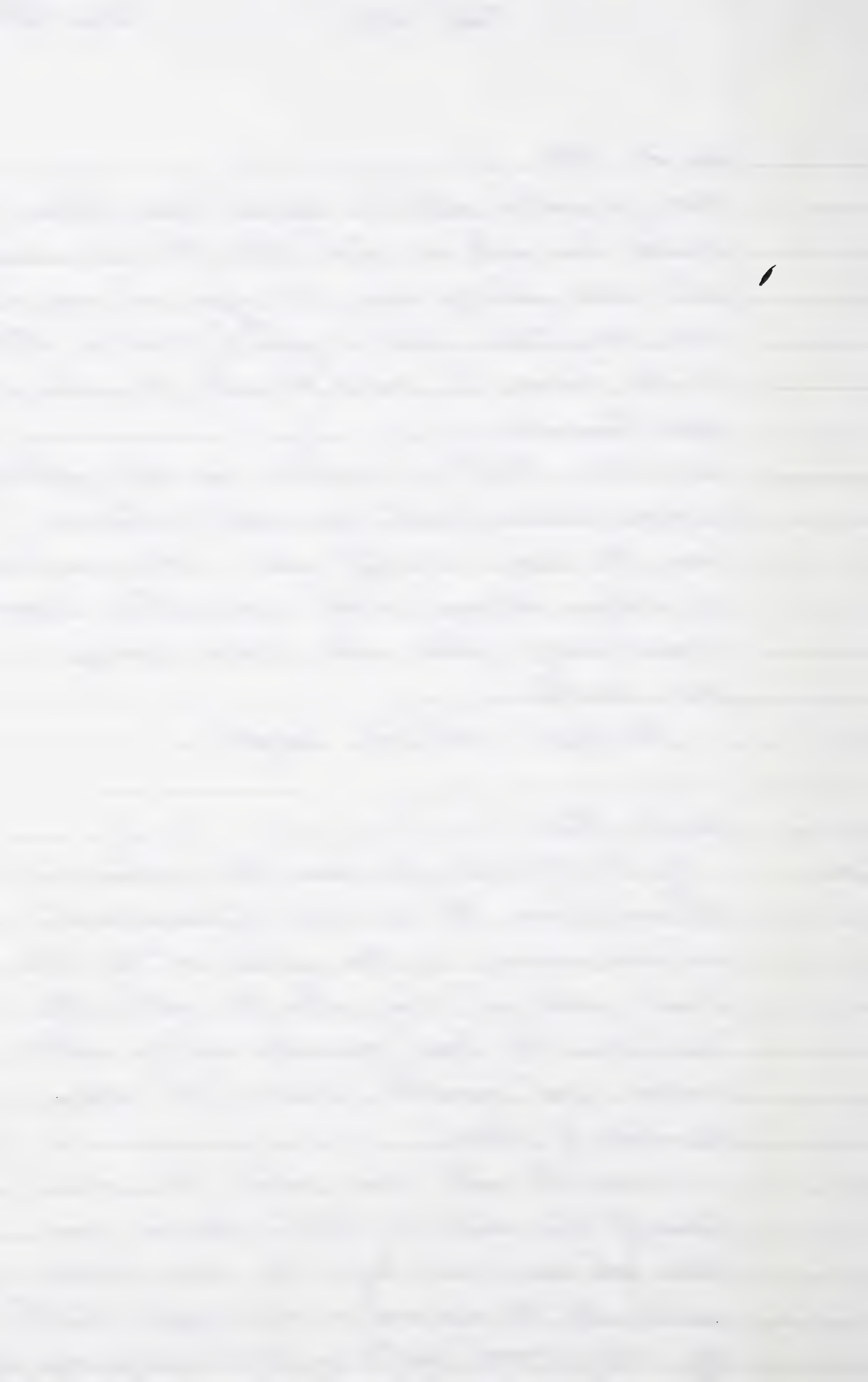
20:00 - 20:30. Went to overlook near the Lighthouse, gorgeous evening light, fair wind. Gulls are using the breeze to cliff soar. Good numbers of Puffins out and about. Some sitting 20 yards, 10 yards away: yellow irides, orange eyerings - just beautiful.

Ate fresh Rock Cod tonight.

July 3, 1988

Up at 05:00 to help launch the zodiac for Bob and Anne. It's the start of commercial salmon season. I then walked out to Tote Point (south end) w/ my coffee to watch the "Rush-Hour" of boats proceeding out to salmon waters. Just incredible. Boats of all sizes, hundreds of them.

Skinned the gull. Then packed. We were taken off the island at 13:15. Saw an osprey, Bald Eagle over Neah Bay. We were on shore, packed into the cars and on our way to Seattle by 15:30. Arrived Seattle ca. 18:45. Spent evening at Tim Woolton's place, because Ken Carasco not at home.





July 4-5

In Seattle. Ken Larasco was home on morning of 4th. Picked up Maren at airport on afternoon of 4th. We went with Ken to show of wooden boats. On the 5th Maren and I went to Pike's Place Market, also the Seattle Aquarium. Took care of renting a roof rack for the car, etc. Seemed to me that fewer gulls were visible in and around Seattle than in previous years.

July 6

Left Seattle around 11:30. Headed for Anacortes Ferry to Friday Harbor. Arrived Anacortes 13:10. Ferry doesn't leave until 15:10. On Ferry ride saw fair nos. of Rhino Analeles. No Balds (Eagles) seen this time. Arrived Friday Harbor 17:06. Joyce Smith still in office. Checked us in. Dinner at the lab (Margie and Susie from Berkeley).

We drove out to Lyme Point for sunset. Saw Bald's Porpoises (~10). The Bald Eagle on same tree as last year - beautiful, clean adult.

July 7, 1988

After getting checked out on the boats, Maren and I road in the aluminum skiff w/ 15 hp motor north out of Friday Harbor to Gull Rock, near Flattop Island. Gull Rock is NE of San Juan Island. Gull Rock is quite small, has a split down the

d



July 7, 1988

middle of it. No trees, just rock & grass. Approx. 60 gulls on the island. We circled the island completely in the course of collecting. One Puffin flew close past us. Shot 4 gulls - all seem to be in good breeding shape (OAB 375-378). Some gulls seen incubating. Kayakers saw us, one tried to reach us. We left before he could. On trip back to Friday Harbor we saw a Minke Whale in San Juan Channel - one whale, medium tall dorsal fin set caudally, long, grayish, slow procession through water. Large breast - perhaps 2x as long as our skiff (15' skiff). We also saw 2 Bald Eagles - both adults, one sitting, one flying (over San Juan Island). Total trip from Fri. Har. to Gull Rock & return: 9:45 - 11:30. Quick.

Towards evening 21:00 - 21:40 we drove back out to Lyme Point to watch for whales. Lots of Dall's Porpoise & Harbour Porpoise in strait between San Juan Island & Vancouver Island. Really calm evening, no wind, coppery sunset.

July 8, 1988

Maren & I were up and out on the Scooter (a glorified Boston Whaler w/ mph motor) by 08:30. Headed South to Colville Island. Took only 45 min. to get there. Glass calm, sunny, hot day. Over the course of 40 min. I collected 7 gulls - hard shooting. They were very skittish. Fired 12 shells total, missed one completely, hit one gull 2x but it kept going, wounded another. Found





July 8, 1988

one of the latter two gulls wounded on the island, so I shot it but could not retrieve the body. We returned via the eastern route around Lopez + Shaw Islands. Saw a couple Puffins, lots of groups of Rhino Anklets. Two ad. Bald Eagles perched on snags. Couple Harbor Seals, one mother with very small pup. Oh yes, Colville Island had Pelagic Cormorants nesting, Double-crested Cormorants around (30), but I did not notice any nests. A few Pigeon Guillemots, and, of course, around 200 gulls. On the cliffs of adjacent Pt. Colville (Lopez I.) large colony (>150) Pigeon Guillemots (damn Spelling!). We were back by 11:30 at Friday Hbr. Lab. Required 2, 5 gal. cans of gas. Worked up gulls, finished tissueing by 18:00. Had dinner in town. Drove out to Lime Kiln Point at 20:00. Stayed out until 22:00. After long wait spotted a few Dall's Porpoises (creek in tail). Then we were just about ready to head home (21:15) when several Orcas showed up. They were heading north around the point, first one, then several. One Big Daddy (with forward tilting dorsal fin). Quite a few medium sized animals, and some smaller pups. Very active. Many times we could see the longitudinal white patch on the cheeks as a whale came up for air. Just gorgeous.

4



July 8, 1988

Approximately 15 orcas paraded past and went quite far north. Just as we thought they would leave disappear out of sight a new group of two small ones, a medium sized one, and a few medium-sized stragglers out of the south appeared. About then, Big Daddy turned and headed south to this group. They met at the point, then all turned and proceeded south along the shore. We tried following them with the car. Could hear their blow sprouts breathing, but could barely see them in the fading light.

On way home saw a Great-Horned Owl & a bat.

July 9, 1988

08:00 Maren and I started in the Scooter for Colville Island. Moderate winds blowing already. The strait south of Friday Harbor has swells. We only made it to the SW corner of Lopez I., when the waves got far too rough - both standing waves and swells. We turned around then, after approx. ~~the~~ 30 min. of boating, and decided to head north back up to Gull Rock. Smoother boating, as it was better protected. Took us about 35 min to get back up to the area for collecting. We circled Gull Rock (near Flattop I.), waited until 4 boats got out of the vicinity, then collected 3 gulls & 3 shots 386-388.

Saw one Tufted Puffin circle the boat at Gull Rock. We were out of the area right away. Had a little difficulty getting a specimen out of the kelp at NW corner of island, but we succeeded.





July 9, 1988

Spent rest of day preparing & stripping specimens. Around 19:00 we rowed into town, had dinner, rowed over to Brown Island, then back. At Brown Island we heard Bald Eagles, then saw two sitting atop a snag right next to one another. One bird was giving the begging cry. We sat on Marine Lab pier till 23:00.

July 10, 1988

Finished doing gull wings, packed up, said goodbye and were on the Ferry to Sidney B.C. at 16:30. The Ferry went right past ~~Sidney~~ Mandarte Island, which is east of Sidney I. and Sidney spit. Mandarte had extensive vegetation, loads of gulls. 2 cormorants, but 1 bird visible. Mandarte is shaped like a S-N loaf of bread. Small trees on eastern side. West side is domed cliffs. (Forgot to mention - 4 Bald Eagles soaring over Friday Harbor as we left. Also saw an adult over central part of island as we drove to Roche Harbor). After passing through customs, where everybody had to put in their 2 cents for my declared purpose & gun, we headed for Victoria. Beautiful, clean city. European, English influence is quite strong. Some places remind one of Holland. Bulls everywhere in the city, and cruising along the waterfront both in the harbor and on the strait. We spent the night in a Bed & Breakfast town (\$55.00 - Canadian).



22

1

July 11, 1988

Met Ted Miller at Royal Provincial Museum. Very nice, enthusiastic. He invited us to stay overnight, and take us on a hike after work today. We pretty much spent the day in Victoria, at the museum. I checked out the gull collections. Ted Miller gave me a couple more contact people:

Alan Burger - Bamfield Marine Station 8-728-3301

Kees Vermeer - CWS 9-356-6537

Marilyn Lambert - Switzswe Tours 477-5922

This evening Ted took us & Frances (a friend) up to Finlayson Mountain, NW of Victoria. We hiked up 340 m to the top of this rock. Great forest around it & hemlock, cedar, fir, etc. Large oaks too. Top was rather dry. Robins, juncos, and a ♀ Ruffed Grouse & brood of 2 wk old chicks. We got very close to her, quite tame. I also asked Ted what accipiter nest around and he said Cooper's Hawks are most common. Last year a pair even nested on the museum grounds.

July 12, 1988

We invited Ted Miller out to breakfast, since he was so kind to put us up for the night and take us out to a Greek Restaurant for dinner (Domestica Wine - \$13.<sup>00</sup> per bottle x 2 bottles!). We then went downtown, back to the museum, bought stamps, tried to find a detailed map of Queen Charlottes, etc. Left Victoria about 11:30, headed to Bamfield (Barber Sound)

/

7/12/88	D
7/13/88	B L D
7/14/88	B D
7/15/88	B



July 12, 1988

via Duncan, Youbou. The paved road ended at Youlou. From then on only gravel logging roads. The trip from Youlou to Bamfield took about ~~7~~<sup>3</sup> hours. Rained hard the whole way. Roads were sometimes OK, sometimes rough. Gigantic logging trucks. Awful clearcuts. Some dense forests though too. Many riparian stretches of alder, good Coopers Hawk nesting areas. Lots of Robins, Swainson's Thrushes, a few Red-shafted Flickers, decent flocks of Band Tailed Pigeons. We arrived at the lab by 16:30. Checked in, met Alan Barger. He helped arrange space, etc. Jackie Lee → Tech; Bruce → boat technician. Saw one ad. Bald Eagle.

July 13, 1988

At Bamfield Marine Station, Vancouver Island, B.C. Arranged to take a boat, a Boston Whaler, out to Baeria Rocks, near the NE corner of Barkley Sound. We left at 10:30. Weather had cleared a bit from yesterday. We had to cross two major channels to get to the rocks - a bit rough, choppy. Several groups of Marbled Murrelets on water. Also one Common Murre at rocks themselves large group of loafing gulls - Ring-billed Gulls, and imm. GWC's. The rocks consist of 2 major groups, one west, w/ light pole, one east. The eastern rock is larger of the two, probably ~~30~~ 30 yards x 20 yards and 2 yards high (at high tide). Just rock & some





July 13, 1988

grass, no trees. Widely-spaced pairs of nesting gulls visible, some incubating. Chummed gulls in 4 bread, shot 5 gulls (8 shells, of which one bird was hit twice, but flew on). I sort of had to wait for adult CWC's to come by out of all the imm. and Ring-bills (DAB 389-393). We drove straight back to the lab. Saw one ad. Bald Eagle. Killed a list. More Marbled Murrelets. Whole trip took us 10:30-12:30. ~~Spent~~ Spent rest of day doing gulls on Marine Lab dock at Bamfield. Some resident Bald Eagles here - at least one adult, one 1 yr.-bird, and one sub-adult. At one time 4 birds were soaring over the station. Much back & forth flying up & down the channel. Weathering clearing at times. Kingfishers, Violet-green Swallows, Barn Swallows, Winter Wrens, Swainson's Thrushes around. One Great-blue Heron is particularly vocal. We moved across to the store at dusk, quite calm.

July 14, 1988

Organized early. Out with the Whaler at 08:40, headed for Braeria Rocks again. Very calm. Many pairs of Marbled Murrelets, quite close. Low tide exposed much more area around the rocks, as well as several rocks to the NW where we were boating yesterday while shooting gulls. Collected 5 birds rather quickly, one required 3 shots. In all 8 shells for 5 birds, no wounded. Nearly all the birds got





July 14, 1988

off today. There were about 200 nesting gulls in the air. Also oystercatchers and some loafing cormorants (Double-crested). Gulls 394-398 collected today. Saw another Common Murre + 2 Bald Eagles on return trip. Back at Bamfield spent rest of day doing the gulls. Saw at least the 3 Bald Eagles several times today. Many NW Crows, occasional ravens. Afternoon was downright sunny.  
July 15, 1988

At breakfast we could see 3 Bald Eagles at the entrance to Bamfield foraging on the mud banks at low tide. One bird appeared to be hopping around on the bank, while another joined it and a third watched from a tree. One ad. and one imm. were on the ground. Another adult in the tree. After breakfast, and many phone calls, all plans for hooking up with people to collect fell through, except for a chance to go out with a boat taking Alan Burger's grad. student to Deland Island out of Tofino. We decided to drive from Bamfield to Tofino on ~~Long~~ Clayoquot Sound. The drive takes ca. 4 hrs. We left at 16:30, arrived at 16:30. Stopped for lunch in Port Alberni. Dirt logging road from Bamfield to Alberni. Saw a ♀ ruffed grouse & chick crossing the road about 1/2 hour out of Bamfield. Took Highway 4 from Pt. Alberni to Tofino - Beautiful country, but oh the clear-





July 15, 1988

cutting of forests is drastic. Tofino is beautiful, neat town & harbor. I called Rod Palm (726-4254), the boat captain for Alan's group. He was reluctant to take me along for collecting, but I convinced him otherwise. We met at the Crab Dock at 17:00, really about 17:30. Alan's grad student, Dan Grier, and 2 people from BC Parks (Jane & Kattie) showed up. They were going out to trap Rhino Anublets and check them for diving gauges. Rod Palm brought 2 small kids along (his 8 and 9 from SF). Went out in a Boston Whaler w/ 2 70 hp Mariners. Fast. Clayoquot Sound reminded me of the San Juans. Clear, sunny, very calm. Took ca 35 minutes to get to Cleland Island (Bare Is.). Lots of feeding Common Murres, Anublets, Marbled Murrelets, etc. Cleland was about the only rock out there w/ loads of nesting gulls on it. Also many loafers including Calif. Gulls. Saw a Harlequin Duck real close. After dropping the 3 off, we went out a ways to the east, and I shot 5 gulls (DAB 399-403). It was very calm out on the ocean. Cleland Id. is a fair distance out from land. Back at the dock by 19:00. Had a beer w/ Marvin & Dave (Charter Sailboat fella). He and Marvin (Sailboat/whale nut who is also the dentist at Tofino) helped set up lights so I

NW Bay Rd → <sup>Rt</sup> Powder Pt Rd. to END DND  
OR  
Straight to Stewart to <sup>Rt.</sup> Dolphin to  
Schooner Cove Winchelsea Charter  
468-9222

Sandwich 468-7023

Mensees Bay

Robert Lake

→ Elk Bay - Road left uphill sharp

→ { Rock Bay  
Little Bear Bay

→ Sayward (Kelsey Bay).

→ Eue River

Mensee Bay - Ken Bakken  
Terry Stoney

at



July 15, 1988

could keep working on the gulls after dark

We spent the night in the Mini Motel next to the Crab Dock (\$5.00). It was really a nice room, upper floor of an A-frame w/ view of Meares Island.

July 16, 1988

We awoke to sounds of Bald Eagles. Spent morning prepping gulls <sup>under Crab Dock Pier</sup>. Two Bald Eagles (adults) around. Had a beer with Dave on his boat. Then we went into town, ate lunch. Headed south to the Pac. Rim Park Hdqs - walked along beach at Wickannish Center. Lots of gulls feeding offshore. One Osprey flew past. Drove on to Uclulet to try to get to the northern point of Berkeley Sound, but too much private property. We found a cove on the west side of the peninsula - possessed by a Kingfisher. We ate a bite, then drove east along Highway 4 for the Parksville / Nanaimo area. We left the west coast of Vancouver Island around 17:00. Arrived on the east coast 20:30. Camped at Englishman River Falls Campground (\$8.00).

July 17, 1988.

Got a speeding ticket on road (Hwy 4) into Parksville - didn't notice I was going too fast - we had just come off the campground, onto main highway. Route into town did not seem well marked & speed





July 17, 1988

signs, I was going with traffic. Suddenly a cop car coming towards us put on its lights, made a U turn behind us, then pulled us over. 82 km/hr in a 50 km/h zone. \$75.00. No explanation. The bastards. After that we drove down to nearly Nanaimo, had a rotten breakfast. I thought we could try collecting at Nanose Bay. We asked at the military base, but it being Sunday, no one could give us permission to shoot. Drove out to Schooner Bay <sup>Resort</sup>, on the point of Nanose Bay. A fair number of offshore rocks. Rented a skiff + 20 hp Mariner motor. Drove the boat first to the guano-covered rocks - Ada Rocks - about 1/4 mile off the point, to the SE. Gulls nesting here, probably 50 nests 1/2 half-grown chicks. About 20 resting D-C Cormorants. Lots of Marbled Murrelets. Too many boats around though. Shot as one gull, only wounded it. Went north to a slightly less populated group of rocks. No real nesting activity, but shot 5 gulls (DAB 404 - 408). These were at the Yeo Rocks - a grassy-island group. Amazing - most of these gulls had starfish remains in their stomachs. I then went back to the harbor, picked up Maren, and we went back out to Ada Rocks. Saw 2 ad. Bald Eagles. That afternoon we drove north. Stopped at a forest drive north near Oyster River, did up the gulls. Heard several ~~at~~ Common Nighthawks, saw Band-tailed pigeon eating huckleberries. We ate

Alan & Betty Brooks

1630 Seaview Rd.

RR 1

Black Creek, B.C.

VORICO

604

337-8180



July 17, 1988

huckleberries and ~~also~~ salmonberries there. Lots of Swainson's Thrushes. Saw one adult Cooper's Hawk. Ate at the Leonard Pub in Comox - great. Spent night at a motel near Campbell River.

July 18, 1988

Awoke to the sounds of Bald Eagles again. Ate breakfast at the Austrian Chalet - behind it in a series of pines 2 Bald Eagle nests - one imm. seen. Drove to Campbell River. Called Alan Brooks, Jr. up - will meet him tonight. Went to B.C. Fish & Game. Met Larry Johnston - he suggested a number of places up north for collecting, said shooting at the dump is out because it's a municipality. Also said I have to buy a hunting license for the gun (\$53.00). Had to go to the Govt Agent for this. Tried also to get turn signal fixed, no luck, mechanics not in on Mondays. We drove up 19 to past Roberts' Lake, took logging road for coast, but it seemed so rough & too far, turned back. Stopped at Boedel-MacMillan Logging Co. for permission to shoot Menses Bay, but it didn't have many gulls. We went back to Campbell River, walked the fishing pier - Pigeon Guillemots, Caspian Tern (1), lots of GWB's, some Bonaparte's Gulls. At 19:00 we drove to Allan Brooks Jr's house. Wife Betty & 2 kids -





July <sup>18</sup> ~~18~~ 1988

teenagers (♂ & ♀). Quite fascinating, great history. Allan Jr. spent 10 yrs in East Africa. His ~~great~~ grandfather was active in SE Asian Ornithol. Allan Senior was good friend of Grinnell's. Sore point ~~with~~ family was donation of his 9000 skins to MVZ. Allan Brooks Sr. was responsible for initially describing the Thayer's Gull, and Allan Jr. has noticed the Thayer's propensity for sitting on low rocky islets or low piers during winter, whereas Herring's will always pick higher spots - pilings, etc., for sitting. They haven't noticed any real change in gull types. Allan & Betty are active in local conservation groups / activists. They let us row a boat out into the strait at sunset - quite nice - Bald Eagles, Common Murre, Marbled Murrelets, Bonaparte's Gulls, CWC's.

July <sup>19</sup> ~~20~~, 1988

Up at 05:00. Maren & I drove out to the Oyster River Enhancement Society's Reserve at mouth of Oyster River. Neat decid/pine woods. 3 River Otter, Winter Wrens, Robins, Red-shafted Flickers, 2 separate pairs of Bald Eagles + one imm. Shot 2 gulls (OAB 409, 410), lost 2 gulls in drink, missed 2. Poor shooting. Too nervous, resorts close by. Mittelbach I, 1/2 + 3000 gulls, due east 8 miles. Drove north to Port Hardy. Ugly clearcuts - worse than in the Amazon, eh?



Tex and Sannie Lyon

Box 107

Port Hardy B.C.

VON 2PO

~~Field~~

# Field Notes

Doug Bell

July 20, 1988

Met Tex Lyon, who used to send lots of Peal's Falcons to Major Allen Brooks in the 30's, trapped mice w/ Terrible Tom McCabe (name due to temper). Tex said he would take me out around Beaver Harbor for gull shooting. We first had lunch at his house, listened to a plethora of natural history. Tex was born in 1907. Spent all his life in Port Hardy, fished for everything on every type of boat, worked on the wharf for years - including during WWII. He writes a weekly column in the local paper. Very sharp - full of lore. We went out in his skiff at approaching high tide - around 13:00 - 15:00. Saw only loads of California Gulls - adults + immos. Tex said they always show up in late spring for a couple months - non-breeders. We saw a pair of Bald Eagles w/ nest + 1 young visible. He said he watched a ♂ stranger Eagle mate w/ the ♀ once, the mate to the ♀ came tearing over, chased the sneaker off. That year they ~~he~~ did not hatch young! Gulls used to nest on a local rock, about 15 pair, but they no longer do. Too much people disturbance. We saw loads of wildlife - Spotted Sandpipers (!), Surf + White-winged Scoters, Harlequin Ducks (mostly ♀ imm, one gorgeous ♂), Black Turnstones (many), <sup>Rhino auklets</sup> Red-necked Grebes, Ravens, Crows, Black Ankers, Harbor Seals <sup>w/ pups</sup>. Tex said mink + deer make it out to the offshore islets. Wolves were nearly decimated on V.C.I. in 40's, then came way back up, now have sort of leveled off. Goshawks + Kestrels have





July 20, 1988

disappeared, we have Swainsons Thrushes. But we saw lots of them at our campground last night, on the Quatso River 2 miles out of Port Hardy. Back at Tex's & Sannie's house we were treated to a wonderful dinner. Could watch an Osprey through their kitchen window hunting - powerful long stoops. All in all, there are probably no nesting GLW's within 20 miles of Port Hardy - ~~either~~ nearest colonies are to the NW & SE.

July 21, 1988

Will sleep at Tex & Sannies. ~~But~~ Tex said he didn't think we would meet again (in a sweet & sour way), but I reassured him we'd be back. <sup>Queen of the North</sup> Ferry left for Prince Rupert at 0730. Just out of Port Hardy we saw a school, or pod of Orcas, right past the boat. Then a Minke whale, then some more Orcas. Lots of Calif. Gulls, Rhino auklets feeding in the strait. Occasional Common Loons in the strait. For the first 1/2 of trip ~~up~~ (to Bella Bella) things were pretty dull. Not much birdlife. Second half of trip (Bella Bella - Prince Rupert) got more interesting. Grenville Strait





July 21, 1988

became much narrower than the others. Weather soaked in and it rained intermittently. We saw lots of Bald Eagles the whole way - mostly adults visible on tops of first tree row up from the water. In Grenville Strait we timed stretches between eagles - one bird every 3-4 minutes at our Ferry's speed (      knots). Surprisingly little bird or animal life ~~visible~~ visible, and no Glaucous-winged Gulls for the entire trip until we got to the sound before Prince Rupert. There was a small colony of GWC's nesting on an islet in the channel to the south of the large coal-plant, probably 5 miles S. of Prince Rupert. Barely any GWC's at Prince Rupert itself - just a few birds. But lots of Calif. Gulls again! Scattered Common Murre, Rhinoceros Auklets. We arrived Prince Rupert at 22:15 (had departed Port Hardy 07:30). Took Benedict, in Deutscher, with into town for lodging at Pinner Inn, but no space available. In fact, the whole town was booked up. Had to pitch a tent in the rain at the campground near the ferry. (\$9.00). The ferry ride was beautiful, especially the second half. Still great stretches of forested islands - looks like old growth. Some logging. Waterfalls which come straight off mountainsides.





July 22, 1988

Awoke to the raucous calls of ~~crows~~ crows - persistent buggers! at the ferry by 10:10. The ferry (Queen of Prince Rupert) finally got underway at 11:30. Only one GWB visible in harbor. One Bald Eagle. Song sparrow at terminal, singing. We passed two ~~islets~~ islets on way out of the sound which had small numbers of GWB's nesting (15 pair on one, perhaps 25-30 on the next). Some common Murres. More Bald Eagles. No more birds for quite awhile while passing through Queen Charlotte Strait. Then began seeing some Common Murres - either individually or in groups of up to 20. Fulmars & Fork-tailed Storm Petrels appeared next - the fulmars were heavy, dumpy looking as they lumbered off the water and flew low over the waves. A few Pigeon Guillemots around, some Ancient Murrelets. No gulls until we entered Skidegate Channel. A small island to the NE of Sandspit had maybe 20 gulls on it, and a couple of the islands on the opposite side of the Channel from Skidegate also had about 30 gulls nesting. More Bald Eagles - adult on the rocks of a large tree island near Skidegate. Upon landing at Skidegate we drove north on the only paved highway of Graham Island. Passed another Bald Eagle sitting in a tree. Heavy rain. The highway up the eastern coast passes low along the beach, much sand, medium-sized conifers stretching out





July 22, 1988

across flat country. Saw a small deer, reddish in color. We stayed at the Bellis Mini Hostel in Thell - what a dump - and it cost \$25.00.

July 23, 1988

Rain. We drove on to Port Clements for Breakfast.

Saw another Bald Eagle. At Port Clements we saw 2 ad, 1 4yr & 1 3yr. Bald Eagle. No gulls. Met Keith, the Canadian working for Mac Millan - Bloedel, again (we had met him at the hostel last night).

Loons at a distance. We drove out the Logging Road to Juskatla. Song Sparrows in brush along the way.

At Juskatla Inlet: 2 ad. Bald Eagles, a large group of Canadian Geese (several adults and 18 cignets), 2 Harbor Seals, a female Red-breasted Merganser with about 20 chicks, 8 Greater Scaup, Belted Kingfisher. Drove back to Port Clements, then up to Massett along Massett Inlet. More Bald Eagles,

lots of crows, ~~and~~ occasional ravens. Several deer.

Rain. Found a B+B next to the wharf in Massett. Asked fishermen for possibility of rides out to Langara I., they said it takes about 2 hrs to get out there - but none

would take me. One guy, Mike, would charter his boat to me for \$40.00 per hour. A possibility, at least.

We went hiking along beach between Massett

and Haide around 18:00. Crows, Bald Eagles (3yr, ad),

Song Sparrows, fledgling Orange-crowned Warblers, Golden-

crowned Kinglet, Townsend's Warbler. Saw one ad ♂

Copper House. David Phillips → Gary leader

20 hrs/hr → 1970  
x3  
600 hrs.  
1 hr  
+ 1 hr

1) Richard Donovan.

Nature of Things, Jarvis St.

CBC Toronto,

2) Port Clements

we & Chris Marrs  
→ SE. 15 mph  
Monday

Masset Inlet: \* Sloop Inlet

557-4574

\* Dawson "

\* Cowley Rock

50 pairs.

3) Q.C.C.

Mary Morris

0-559-4746

Louise Island: Skedans  
Skidegate Inlet.

4) Marvin Boyd

559-4222

Anthony Islands

So. Moresby  
air charters

\$2.00 mile / Kingsway Rocks - Savlet Inlet  
\$128.00 \$40 hr/west  
\$168.00 → 200.00

5) Sandpit

637-5711

This week, wed.

\* Dave Putteril

\* Elephant Bay - Cooma Park.

Sandpit - Grassy Island.  
Gillet Island.

Sandpit:

Mark Walsh 637-5497

John Cooper: 626-3233

- Margo Hearn

Mike Brown } T  
Janet " }  
557-4516

Fisheries  
CW 5

Q.C. Dock

Terry Hayman.

Boat: Schoelz.

M. Tues.

\$100.00/day

Masset Cove

R+ & LFT

Red R NP

\* 4



July 23, 1988

Glaucous-winged Gull flying up Marslett Inlet.

July 24, 1988

Spent night at Copper House B+B (David Phillips) at the wharf of Marslett. (\$50.00 a night) - but this has to be the nicest B+B we've ever stayed at - and it was worth it to be out of the rain. David Phillips had a number of contacts which I'm trying to <sup>use to</sup> get out to gull colonies. Since it is ~~today~~ <sup>Friday</sup> and the weather is mixed, and no one official can be reached until Monday, we've decided to go hiking out to Tow Hill at Naikoon Provincial Park. We parked at the lot just E of Tow Hill, followed the river out to its mouth. Saw a family of 4 Winter Wrens + 1 ad. in the brush. Quite cute. Lots of orchids along the trail. The beach just north of Tow Hill stretches out to Rose Point over many miles, sweeping to the NE. Directly behind the low flat beach ~~are~~ is the forest. We hiked to the mouth of the river - which due to the dark cedar-tannins flowing from it (it looks like tea) turns the ocean waves ~~to~~ brown. Also strange rock formations - smoothed lava with L ribs and neat tide pools. Common Loon, White-winged Scoter, Red-breasted Merganser feeding just offshore. 1 ad. GWC flew by. Song Sparrows in brush up from the rocky coast. Lots of NW Crows. We rested along the river - watched the young crows begging their adults. All different sounding by voice. A sub-ad. Bald



CWS

Mossett

Fisheries : Lytle Enderud

- Keith Moore <sup>F+W</sup> Habitat Protection 559-8431

- Jim Smith Island Protection Society 626-5485

- Peter Kalina CFW 559-8431

✓ Alex Jones 626-5112

Haida Nation

Box 312

Mossett, B.C.

VOT IMO

4516

Janet & Michael D. Brown

PO 303

Port Clements

VOT IRO

604-557-4516

Dave & Audrey Putterill

Box 424

Sandspit B.C.

VOT ITO

637-5711

R.C.C.

\* Tom Rutherford off. 559-4745  
hmn. " - 8263

Palent Ck. - Mosby Camp.

Satellite Hatchery - Mathers Ck. Hatchery - on Louise Island.

RCMP Mark Price Sandspit

637-5477

July 24, 1988

Eagle soared out over the ocean while an adult soared over the forest. Intermittent rain showers - but also sun. We hiked halfway up Tane Hill - incredible greens, lush forest - a true rain forest. So much dark water in mini-lagoons everywhere. Kingfisher along the river. We drove back to town.

At 19:00 - 20:30 went to the Bird Sanctuary at the lagoon next to Massett. Saw about 40 Canada Geese, a couple Lincoln's Sparrows, some Least Sandpipers. Also an Eagle nest w/ one fledgling; the nest is over a black top road leading to the bird watch tower.

The pavement is totally white-washed. Then drove to the dumps south of town (5 miles). Only loads of Rancors + 1 3yr Bald Eagle. Had dinner at David's house, stayed overnight there. Met 2 couples w/ Dept. Corrections who had come out to dinner at David's.

July 25, 1988

Left David Phillipps B+B (Copper Beech House). Tried calling some people, stopped in at Fisheries Office (Lytle Enderude) No luck on getting a boat ride. Met Alex Jones (Haida Indian) at the cafe. He told us that they used to take gull eggs out of Massett Inlet. We then met John Cooper and wife Dianna. They're studying the least sandpiper population at the sanctuary. There were no sandpipers there before '64, when it was a salt marsh.





July 25, 1988

But since the causeway was put in it's become freshwater. Anyway, they have neat data on the birds. John is Ted Miller's grad student. The causeway will be torn out to allow the marsh to revert to salt water. Will be interesting to see how the sandpeeps do. I called Chris Marrs, who had contacted Michael Brown of Canadian Fisheries. Michael is down in Port Clements. We drove down there, found out Michael's telephone no. and called. He agreed to take me out to the islands in Marsett Inlet for gulls - and no charge, since he said he has to patrol anyway. So we agreed to meet at the dock at 15:00. Michael is a big fellow - beard, thick glasses. We headed out into the inlet - thick overcast and clouds looming in the horizon. I collected the first three gulls we saw - 2 w/one shot off a log near Sloop Islet (412, 413). Sloop Islet is a small rock - no gulls nesting now - but it had a few earlier this spring. Then we went further up the inlet. One gull near McCreight Island (414), then three <sup>seen</sup> at mouth of Yakoun River, but they stayed out of range. Shot one at Ross Island (415). Then 3 at Cowley Rocks (416-418), where there were about 25 gulls hanging out. Cowley Rock even had a couple song sparrows - thick brush. Could not see any gull chicks. Chris Marrs said about 50 gulls nest in the inlet total. Rained pretty hard by the time we got back. In all six shots for 7 gulls. Spent night with Michael. interesting place.

2 gulls/1 shot

Total:

6 shots/7 gulls





July 26, 1988

Michael Brown works part time for fisheries doing patrol (he caught 2 guys yesterday fishing without a license - \$50 fines). His wife is Janet - who runs a bird sanctuary at Sewall, across the inlet from Port Clements. Janet's parents - Kit + Bruce Gifford, homesteaded Sewall beginning in 1969. The place has a long history before that - it used to be the "town" for logging - but the location is horrible - 90 mph winds in winter, etc. at any rate, Michael took both Maren & I out to shoot a few more gulls - I collected 2 at Cowley Rocks (419, 420). Then we went over to Sewall to meet Janet & her parents - very nice place - a spotless homestead w/ loads of Canada Geese, deer (tame), ducks of all sorts, fish hatchery, tame crow. An incredible lifestyle. After an hour & a half we were taken back to Port Clements. I spent the rest of the day doing the gulls. Had dinner and long talk with Michael this evening. Stayed at his house overnight.

July 27, 1988

Drove from Port Clements to Queen Charlotte City. Saw many Bald Eagles, Red-breasted Sapsucker, Cassin's Finches (flock), Song Sparrows & young, Robins, Kingfisher. Common Loons.

Crossed over to Akilford Bay and Sandspit with the ferry. Met Dave and Audrey Putterill Putterill in Sandspit at 17:30. On the ferry ride across



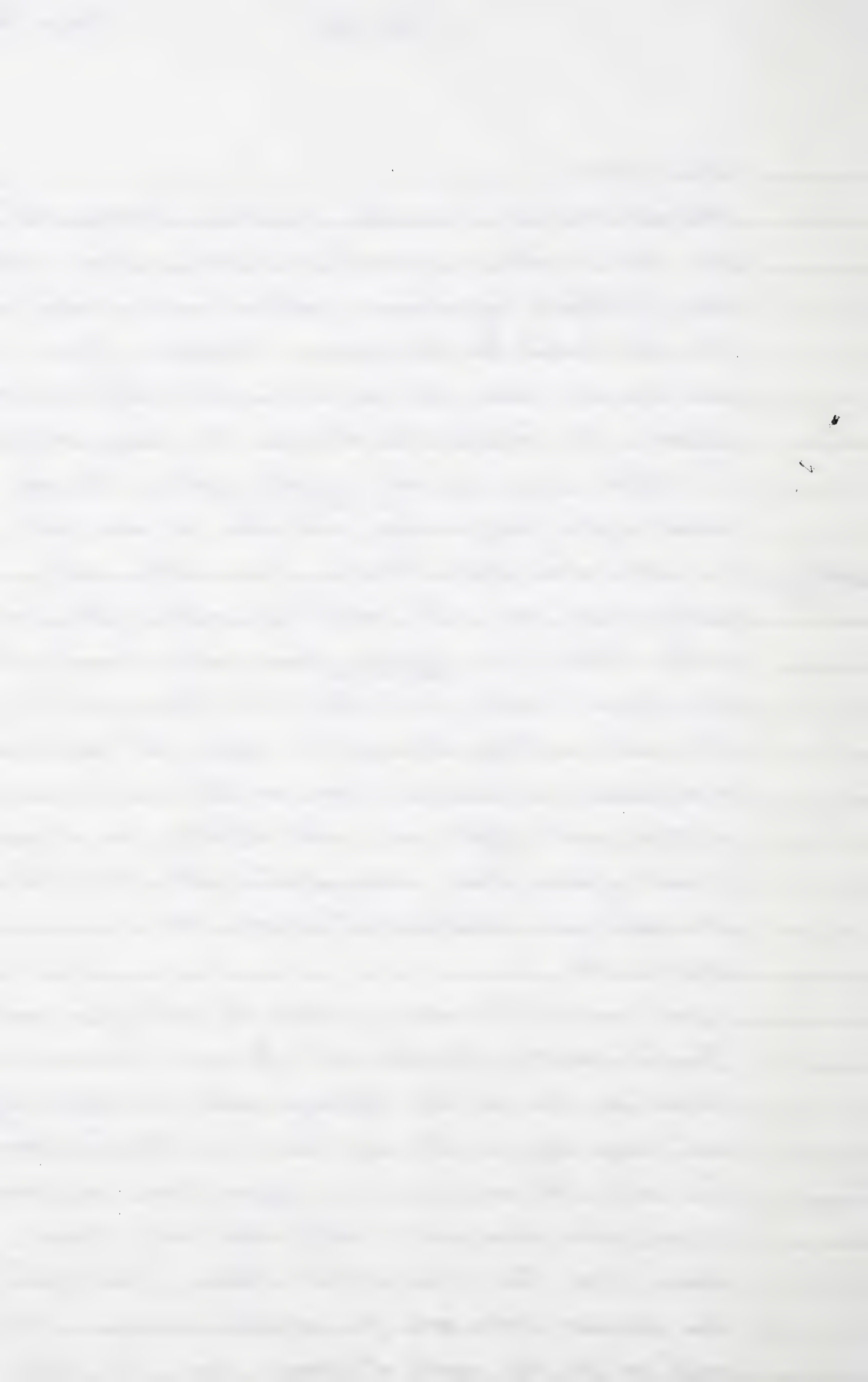


July 27, 1988

Skidegate Inlet I counted 15 gulls on Flowery Islet, and 20 + 30 gulls on one rock to the west, and one to the east, of Alliford Bay entrance. Could not see any chicks, but the birds looked like they were on territories. Dave and his son, Chris, took me out in their skiff w/ 30 hp outboard. We launched the boat from the ferry landing at Alliford Bay. I shot 4 gulls right in the <sup>ALLIFORD ISLETS</sup> vicinity of the ferry landing, and then 2 more out by Bare Rocks (Bush Islands). These rocks, really consisting of only one islet suitable for nesting gulls, had about a total of 50 <sup>(DAB 421-426)</sup> Glaucous-winged circling around. In all, I fired 8 shots for 6 gulls. We then went to the beach south of the airport to camp, but gale winds were forecast, so Audrey & Dave invited us to camp in their yard. Slight rain while collecting. As it were, I used Dave's shed to do up the gulls. We didn't get back from collecting until about 20:30.

July 28, 1988

Spent most of the morning doing the gulls from yesterday. Finished everything towards mid-afternoon. Maren & I decided to drive out the logging road to Copper Bay and Grays Bay on the east coast of Moresby Island. The route took us along the Copper River - gorgeous. A lush alder-lined river. Water does look coppery. Several logs, too. Red-shafted Flicker, Bald Eagles. The terrain looks good for accipiter nesting. We went out to the point at Gray's Bay. The tide





July 28, 1988

was low, so we could walk out to the small island.

A couple people were ahead of us when I saw a year-old tiered Peuli Peregrine come swooping around the point ~~and~~ from the south and head out over the bay, only to turn and come back in to land in a snag behind us. I ran back to the car to get my scope. Before I could set it <sup>up</sup> the tiered took off and flew straight to the rocks way out by the island, he chased several oystercatchers, then landed on a rock. Through the scope I could see his dark head, with long thick malaris. His breast was fairly light, but his belly had the classic chocolate-felled contour feathers.

Just beautiful. The people ahead of us must have scared him up, for he took off and returned to the snags on behind us. Out of view, though.

The rocky shores & flats had lots of sandpipers (Western?), oystercatchers. Bald Eagles, too. The only gulls visible were way to the south - barely in view. I think there were many gulls on one island which may have been Skedars Island.

We drove back up to Sandpiper (Bald Eagles, Hermit Thrushes). Thence out to the creek just west of Allford Bay. Wanted to collect gulls at the creek, but just didn't get a chance for a clear shot. A couple Dall's Porpoises came by close to shore. One gull tried to harass a Bald Eagle.





July 29, 1988

Dave took Maren & I back out to Alliford Bay. I shot 4 gulls at <sup>(BUSH ISLAND)</sup> Bare Rocks (427-430), and 2 gulls at Flowering Islet (431-432). 6 gulls with 7 shots. Dave then landed us at Maude Island. Lots of Otter & Raccoon scats. Great fossils in the rocks, and the grave of Captain John (an Indian Chief). Bald eagle nest w/ a big, nearly fledged chick. Saw adult feeding it.

6 birds/  
7 shots

July 30

Spent the night at a B & B. Said goodbye to Dave & Audrey (Chris, Leo, Evan). Dave is a logger on Moraby. They were very nice & helpful, and we enjoyed talking away each evening. For all the boat rides Dave only wanted \$20.00. We took the ferry back to Queen Charlotte City, then drove up to Mossett for dinner. Back to Port Clements to pick up my other gulls. Said goodbye to Michael & Janet Brown. Saw an ad. Red-tail between Port Clements and Queen Charlotte City, and loads of deer.

We departed The Queen Charlottes at about 23:30 on the ferry. Slept on deck. Heavy rain towards morning. Arrived in Prince Rupert at 07:30 the next day.

July 31, 1988

We drove out the Yellowhead Highway (16) east to Terrace, about 146 km away. Nice trip. Wide inlet & river (The Skeena). Great expanses of cottonwoods on flat islands about 1/2 way to Terrace. Kingfishers,





July 31, 1988

Bald eagles, Calif. Gulls, Red-breasted Mergansers. Even ~~was~~ found the rectrices of an osprey. Goshawk. Weather was unsettled, rain off and on. Back at Prince Rupert we went to a movie (Bic), then had a beer at the Ocean View Hotel. Beautiful sunset - clearing.

August 1, 1988

On the ferry to Port Hardy at 07:30. Clear sky, but thick fog in the Prince Rupert Channel. It soon cleared, however, and the view was spectacular. Blue sky.

Common Gulls, Calif. Gulls, Arctic Loons, Greater Scaup, Black Scoters, Dall's Porpoise, Dolphin, Bald Eagles.

RON SHANN,

THE UNIVERSITY OF BRITISH COLUMBIA  
RESEARCH FARM OYSTER RIVER  
R. R. 1, CAMPBELL RIVER, B. C., CANADA  
PHONE 923-4219 V9W 3S4

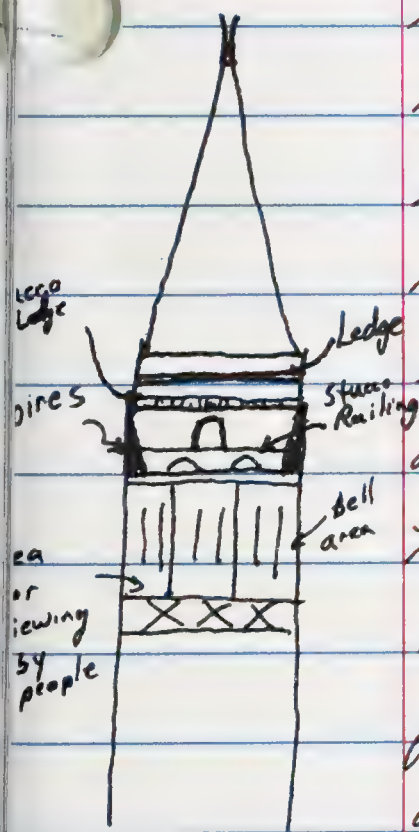


Location: U.C. Berkeley campus, Berkeley, CA. (Alameda Co.)

Weather: clear, sunny, ~~warm~~ - hot.

October 19, 1988

Bob Jones said that someone reported seeing a peregrine at the Campanile last night around 17:00. I went up to the Campanile around 11:30, saw a dark falcon sitting on the first major ledge beneath the "pyramid," <sup>west side.</sup> I was going to run home to get binos, but remembered Julia Smith had a spotting scope in her office in MV2. I ran back to MV2, told a few people about the bird, grabbed the scope and went back up to the Campanile. John Trochet & Chris Schneider arrived at same time. The falcon had moved from the west ledge to the north ledge, in the shade. Set up scope next to main library. First view of the peregrine - dark bird! ~~We~~ Definitely Peregrine. We quickly moved over <sup>to</sup> the north side, where, in the shade of the Campanile, I set up & got good view. Could tell right away that it was dark chocolate on back, thick malar stripe. We moved to NE, viewed the bird from the entrance to one of the chemistry buildings. The lower breast, flanks on the peregrine appeared quite dark from our angle. We decided to go up to the top of Evans Hall (Computer Building) for possibly a better look. Went to the west-facing balcony on the 10th floor. Got clear view of the peregrine. It was sitting on ledge beneath pyramid. Appeared very dark, cere bluish, legs almost yellowish & black talons. Its back was at first towards us. Thick malar stripe, creamy throat, but thin ~~be~~ shaft markings even on upper breast. At first the peregrine looked like a ♀, as it was sitting quite "discreetly", and it was hard to



N-Face





Location: U.C. Berkeley Campus

October 19, 1988 - cont #2

judge its true size. But ~~it~~ then it "tightened up", flattening out its feathers. A small head on thin body was clearly seen <sup>\*</sup> → definitely a ♂ (tiercel). After a couple minutes the tiercel walked along the ledge and picked up some remains of what looked like a small bird. White-throated Swifts were coursing about, and the tiercel observed these intently. John Trochet behind me saw the peregrine picking at some black & white feather clumps of a swift. ~~But~~ I could only see black feathers. In any case, the tiercel did not have any sort of a full crop. We watched the tiercel pick at its food remains on the ledge for ~~at~~ a few minutes, then it walked a few more steps towards the NE corner. No bands or markings ~~on~~ visible on any legs? A wild bird. We watched the bird until 12:08, then left. The bells in the tower did not bother it in the least. At 14:00 I went back up to the 10 floor balcony of Evans Hall.

The tiercel was now sitting on the stucco railing that is confluent with the 4 spires. It is the last human-access area, but of course, its closed to entry. The tiercel was devouring a bird. After a while I figured out it was eating the meaty pectoris and drumstick portions of a pigeon. Tail of pigeon still attached. Lots of grey & white feathers. It plucked the white vent feathers. The tiercel already had a substantial crop. While it was eating I got views of the peregrine from all sides. It's a very dark-brown bird on the back. Only faint lt. brown wing <sup>+ back</sup> covert ~~etchings~~ <sup>etchings</sup>. Quite evenly dark ~~over~~ brown.

\* see notes from Jan 30, 1989 - Feb. 1, 1989 - It is <sup>after</sup> this a female!





Location: UC Berkeley Campus

October 19, 1988 - cont #3



It has a long, thick malar strip going all the way to the upper breast. The breast markings (longitudinal ~~too~~ thin brown markings on the shaft begin right where the malar stripes leave off. The entire breast & flanks are so marked - looks very orderly. The markings on shaft are too thin for a Peal's. The only clear, unmarked spot areas on this bird are the throat and an area just behind the malars and ~~at~~ below the ears. Some shaft markings in the clear area on head behind the malars, where brown nape <sup>+ back of head</sup> blends into the area behind the malars. The nape has two - few strands of light brown, gold ~~at~~ in it, otherwise the back is uniformly dark. There is no light area or stripes above the eyes, as a E.p. tundrus would have. All things considered, this is probably a E.p. anatum. The lower belly & flanks has some thicker shaft-markings, but it is surprisingly "neat" in appearance. This tiercel ate non-stop from 14:00 - 15:00, pausing for alert viewing of its surroundings. It tore chunks of pigeon pelvis, eating smaller pieces of bone, finally, towards end of its meal, it swallowed on pink pigeon foot whole. It picked over all last remaining scraps, as if it just couldn't bring itself to pass anything up in spite of being loaded with a full crop. After it finally finished, he walked along the railing to the NE corner, peaked its bill, stretched, then after a few minutes it launched itself out and circled the campenile in a few times, powering,





Location: U. C. Berkeley Campus

October 19, 1988 - cont #4

heavy flight, it circled in front of the campanile, then finally circled back and landed on the east-face ledge below the pyramid. I could not see it from Evans' west balcony, but did see it from the east balcony. Left at 15:10. Next observation was as I headed home around 17:15 - he was still sitting on the same east ledge. We drove to the lot at Stanley Hall at 18:45, after sunset, he was still sitting there. Passed along memorial stadium road at 19:10 - tiercel visible just outside of pyramid lighting, still on the east ledge. 20:40 - Tiercel Peregrine still on east ledge, some fog moving in.

October 20, 1988

The tiercel was photographed by John Trochet around 9:30; by Chris Schneiders around 11:00.

Joe T. Marshall observed the bird flying around the Campanile at mid-day. I did not get the chance to go to the Campanile until 16:00. No bird in sight. At 17:45 - 18:10, I went up to the 10 floor balcony of Evans (west side) to observe the Campanile, no sign of the peregrine. At 21:30 went to Campanile. Fog very thick, hard to see the ledges, it did not look like the peregrine was roosting up there.

Oct. 22 - checked at 16:00<sup>sun</sup> 19:00 clear, cool  
-5<sup>sun</sup>

Oct. 23 checked at 14:00 - sunny; no bird.

Oct 24 - checked at 12:45 - 13:00 no bird



Location: UC Berkeley campus.

October 21, 1988

13:00 - 13:10 Went with Bob Jones & Bill Rogers up to Campanile.

Saw the tiered Peregrine sitting on the stucco ledge of east face of the Campanile. The peregrine is very much at ease, sitting relaxed. 14:00 - 14:15: Went w/ Bill Rogers up to 10 floor east balcony of Evans. Put scope on the bird - it's still sitting on the stucco ledge of the east face. Obvious bulge in crop. The peregrine made several head-crop movements to possibly settle the food into the crop better. The bird must have eaten very recently. It was resting ~~on~~ on one leg, occasionally closing one or both eyelids - dozing.

17:45 - Peregrine still on east stucco ledge. When I moved to get a better view, the next time I looked up, the falcon was gone. It had moved quickly to the SW corner of the ledge just beneath the top glass light structure at the ~~the~~ pinnacle of the campanile. There it sat, intently looking about at first, then "relaxing" more as time went on. The six o'clock bells, and jingles, did not frighten it. When I left at 18:15, nearing dusk, it was still sitting up there. 23:45 -

24:00 a quick check revealed the peregrine had moved back down to the east stucco ledge for roosting.

October 22, 1988 ~~XXXXXX~~ ~~XXXXXX~~

Checked Campanile at 16:00 and at 19:00, no peregrine anywhere in sight. The day is sunny,



UNIVERSITY OF CALIFORNIA

**Berkeley**

1989-1990





Location: UC Berkeley

October 22, 1988

and there are several airplanes, including a biplane w/ banner, flying over the campus for the football game. Perhaps this activity scared the peregrine away.

October 23, 1988

checked the Campanile at 14:00. Weather is just barely in fog belt. No falcon.

October 24, 1988

checked Campanile at 12:45-13:00. No falcon.

Nov. 1, 1988

Observed the Peregrine sitting on the East side of Campanile, Ledge #4 (Stucco Ledge) at 13:00.

17:15 - Peregrine on N ledge #3, eating. Dunk.

19:45 - Peregrine on S ledge #3, preening.

23:45 - Peregrine on N ledge #3, roosting.

November 2, 1988

checked Campanile at 11:30 + 13:45 - no Peregrine.

November 3, 1988

10:45: Peregrine sitting on ledge #3, N side, near W corner.

Light rain.

November 6, 1988

13:10 Peregrine on E ledge #2.

15:00 - 16:35 - Observing the Peregrine from on the Campanile from the W balcony (10th floor) of the Computer Building. Weather sunny, clear.

15:00 - Peregrine on E ledge #2, NE corner, sitting.





Location: UC Berkeley

November 6, 1988 - cont.

15:15 - 15:40. Peregrine still on ledge #2 (E), preening off and on.

15:45. The bird relaxed, tucked one foot up. Good crop visible.

16:15. The falcon stretched, "sliced" some excrement.

16:40. Preened a bit, stretched.

15:25. He flew off E ledge #2, circled the campanile once, circled in front of the campanile to the west, then appeared to fly up to the south ledge, out of sight. Must have landed.

15:35. I walked around the campanile to find the falcon, but could not see it. Was it roosting out of sight on the walkway?

November 7, 1988

17:00 - 17:15. As I left LSB to walk up to the campanile I saw the falcon take off from the West ledge (#2) in one fast direct flight towards the south. He ~~through~~ threw up about 10' roughly 100 m to the south, then stooped ~~reverse~~ vertically down after turning. I couldn't see him finish his stoop, or what he was stopping at. He returned to the W ledge (#3), unsuccessful.

November 8, 1988

12:40. No peregrine on campanile.

16:30 - 17:00. Watched the Peregrine ~~see~~ sitting on West ledge #4, eating a brown & white pigeon. It was consuming the last of it - the pelvis & legs.





Location: UC Berkeley

November 8, 1988 - cont.

It swallowed one leg + foot whole, and tore up most of the pelvis into small pieces. I left after the bird had finished eating, ~~and~~ peaked its bill, scratched, and settled on the ledge.

November 9, 1988

I did not go to the Campanile today, but R. E. Jones saw it up there at noon today.

November 10, 1988

12:45 I observed the falcon on the N ledge #4, sitting at NE corner.

15:15 - 15:40. Chris Schneider and I went with the head of Pest Mgmt. Services, Art Slater, and a fellow from Facilities Mgmt., Jeff Davis, up to the upper walkway of the Campanile to collect prey remains. We had to squeeze through the very narrow ~~the~~ staircase to get to the level above the observation level. So we were on the shelf behind the stucco railing (ledge #5). Collected numerous pigeon remains, including a banded pigeon leg (at least 4 pigeons total (a fresh pelvis, cleaned of meat, sat on ledge 4 of 5 side. Also flicker feathers and the legs and skull of a burrowing owl! There were many castings from the peregrine and much white-wash. The walkway was flooded on the east side. Jeff Davis said some workmen had seen the falcon about 3 weeks ago up in the spire of the



h

## Field Notes

Doug Bell

Location: UC Berkeley.

November 10, 1988 - cont

tower, where it may have been roosting! But to do this, it would have had to fly through the open bars of the observation level, up past the bells, through a large hole between floors and into the spire. The only way out would be by the same route - highly unlikely! No sign of the falcon.

November 14, 1988

17:00 The peregrine was sitting on Ledge #3 of West face. Dusk.

November 15, 1988

13:10 & 17:00 Checked Campanile, but no peregrine.

November 16, 1988

15:00: Raining. Peregrine sitting on N. ledge No. 3.

November 17, 1988

10:00: Checked Campanile, no peregrine.

November 18, 1988

15:00: Checked Campanile, no peregrine.

November 20, 1988

20:00: Checked Campanile, no peregrine.

November 21, 1988

12:30: Rain. No peregrine on Campanile.

November 22, 1988

14:00: Rain. No peregrine on Campanile.

17:30        "                        "                        "                        "                        "





Location: Mt. Diablo, Contra Costa, Co., Calif.

Weather: High clouds, front moving in.

November 5, 1988

Maren, me, John Gaim and 2 other ladies went hiking up to Eagle Peak, NW of the main peak of Mt. Diablo. We left at the park staging area at end of Mitchell Canyon Road. Underway from 12:30 - 17:30. Steep climb! Saw Phoebe, Nuttall's Woodpecker in lower oak fields. Western Bluebird too. On way up a narrow canyon through ~~chaparral~~ ~~chaparral~~ chaparral. saw & heard: Wrentits, Benich's Wrens, Scrub jays, Hermit Thrush, Hutton's Vireo (called this one in close with "jisiches"). Also: Marsh Hawk, Sharp-shinned Hawk, Cooper's Hawk, 1 pair of Golden Eagles circling about Eagle Peak. From Eagle Peak, towards dusk, I heard White-throated Swifts, but didn't see them.





Location: UC Berkeley.

November 23, 1988

11:30 No peregrine on Campanile.

16:45 While walking up to the top Campanile<sup>(from west)</sup>, at the level of Wheeler Hall I "heard" of pigeon whizz past, it was going in a straight line, coming from behind me at a steep angle, and literally dived into some trees just west of Wheeler. I could hear the wind in its wings. "How odd," I thought. Within a minute I ~~had~~ had walked around the south end of the Campanile, no peregrine when I looked up at the ledges of its south face. Then I passed under some trees to look at E face, and low and behold, the peregrine was sitting on ledge no. 3 of the S face! So, he must have just flown up there inbetween the time I had looked at the S face and passed under the trees. This all transpired within about 2 minutes, so I suspect the falcon had been chasing the pigeon that zipped past my head. But I never saw the ~~of~~ peregrine flying, he must be circled back behind some buildings.

22:00. Peregrine still on S-ledge #3 of Campanile.

November 24, 1988

08:00. Peregrine on ledge #2, west face. Sunny morning. I parked the car just at the NE corner of Wheeler Hall. Tossed up a pigeon whose eyes had been gently covered with cotton. The pigeon rose up vertically about 30', and the peregrine started for





Location: UC Berkeley

November 24, 1988 cont.

it almost immediately. However, the cotton came off the pigeon, at which point it turned and accelerated down the long road (due west) towards USB. The Campanile is quite high, so it seemed to take a while for the peregrine to "eat-up" the space from its high position down to the pigeon, which was dropping ever lower to the roadway. The peregrine did a pumping long stop, essentially, but it pulled out when it ~~had~~ reached building-top level. The pigeon at this point was less than a foot off the ground, and curved around California Hall, heading north. The peregrine returned to the W face of the Campanile. Looks quite alert!

November 25, 1988

0900 Went to Campanile / pigeon. But the tiercel was already eating one, up on ledge #3 of S face of Campanile. It looked like he was working on the breast meat, wings of pigeon visible - light brownish pigeon.

November 26, 1988

16:30. Peregrine on S ledge #3 of campanile, sitting.

November 27, 1988

07:00 - 08:00 Went to Campanile w/ pigeon. No Peregrine.

November 29, 1988

09:30 No Peregrine on Campanile.

17:00       "

"





Location: UC Berkeley.

November 30, 1988

17:30. No peregrine on campanile.

December 1, 1988

12:15. No peregrine on campanile.

December 2, 1988

12:30 No peregrine on campanile.

December 3, 1988

12:50 Tiersed peregrine on N ledge #3 - eating prey, which is either small, or has already been mostly eaten.

December 4, 1988

14:45. Weather sunny, warm. Walked towards campanile from Northside. Could see the tiersed sitting on N ledge #3.

Went up to 10th floor Evans, but could not get out onto the balcony. Went back down to 2nd floor balcony.

At 14:55 watched the peregrine leave the campanile and fly straight north, skimming past the west face of Evans at the building height up to the level of about Euclid ave.

At which point the tiersed turned sharply west and began a long pumping dive. The tiersed fell from sight approx. west of Holy Hill. It reappeared not more than 10-15 seconds later out of the NW area of the campus. It was flapping hard, and coming from a very low position. It "labored" to gain height, coming towards the campanile. Clearly, a pigeon was dangling from its feet. The tiersed returned to the campanile, circled behind it once, then landed on the N stucco railing (ledge 5). Pigeon wings still jerking. The tiersed looked about, then dispatched it with bites to the head/neck.

-The tiersed was visible panting while flying to the campanile.





Location: U.C. Berkeley, Berkeley, Alameda Co., Calif.

December 4, 1988 - cont.

15:05. Tiercel still on ledge 5, looking about. Has not broken into the pigeon yet. Panting a bit.

17:50. No peregrine on Campanile.

December 5, 1988

09:30. Peregrine sitting on N ledge #3.

14:30-15:00. No peregrine on Campanile.

December 6, 1988

13:00. No Peregrine on Campanile

17:00

December 7, 1988

13:30. No Peregrine on Campanile

December 8, 1988

09:30 No Peregrine on Campanile.

17:00

December 9, 1988

16:15 No Peregrine on Campanile.

December 10, 1988

13:00 No Peregrine on Campanile.

15:45-16:00 No Peregrine on Campanile.

December 12, 1988

10:00 Hot, sunny. No peregrine on Campanile.

16:00 Peregrine on N ledge #3 - sitting. He ran to the NW corner of the ledge to watch a Cooper's Hawk moving W → E to the west of the Campanile. Then the tiercel Peregrine launched himself off the corner and headed due west in level flap/glide flight.

16:15-17:00 No peregrine.





December 13, 1988

13:00 - high winds, no Peregrine on Campanile

17:00 - No Peregrine.

December 14, 1988

11:00 - Peregrine on ledge #3, South Face - sitting

High winds.

December 16, 1988

14:00 - No peregrine on Campanile.

December 19, 1988

14:30 - No peregrine on Campanile.

December 20, 1988

10:00 - No peregrine on Campanile.

December 21, 1988

14:00 - 15:00 - Tired peregrine on N ledge -

#2 - NW corner. Crop  $\frac{3}{4}$  full, resting.

Occasional dozing off - both eyes shut ~ 5 sec.

Beautiful views w/ spotting scope from 10th floor of Evans Hall balcony.

January 4, 1989

10:00 - No peregrine on Campanile

17:00 - "

January 5, 1989

10:00 - No peregrine on Campanile.

January 6, 1989

09:30 - No peregrine on Campanile.

January 9, 1989

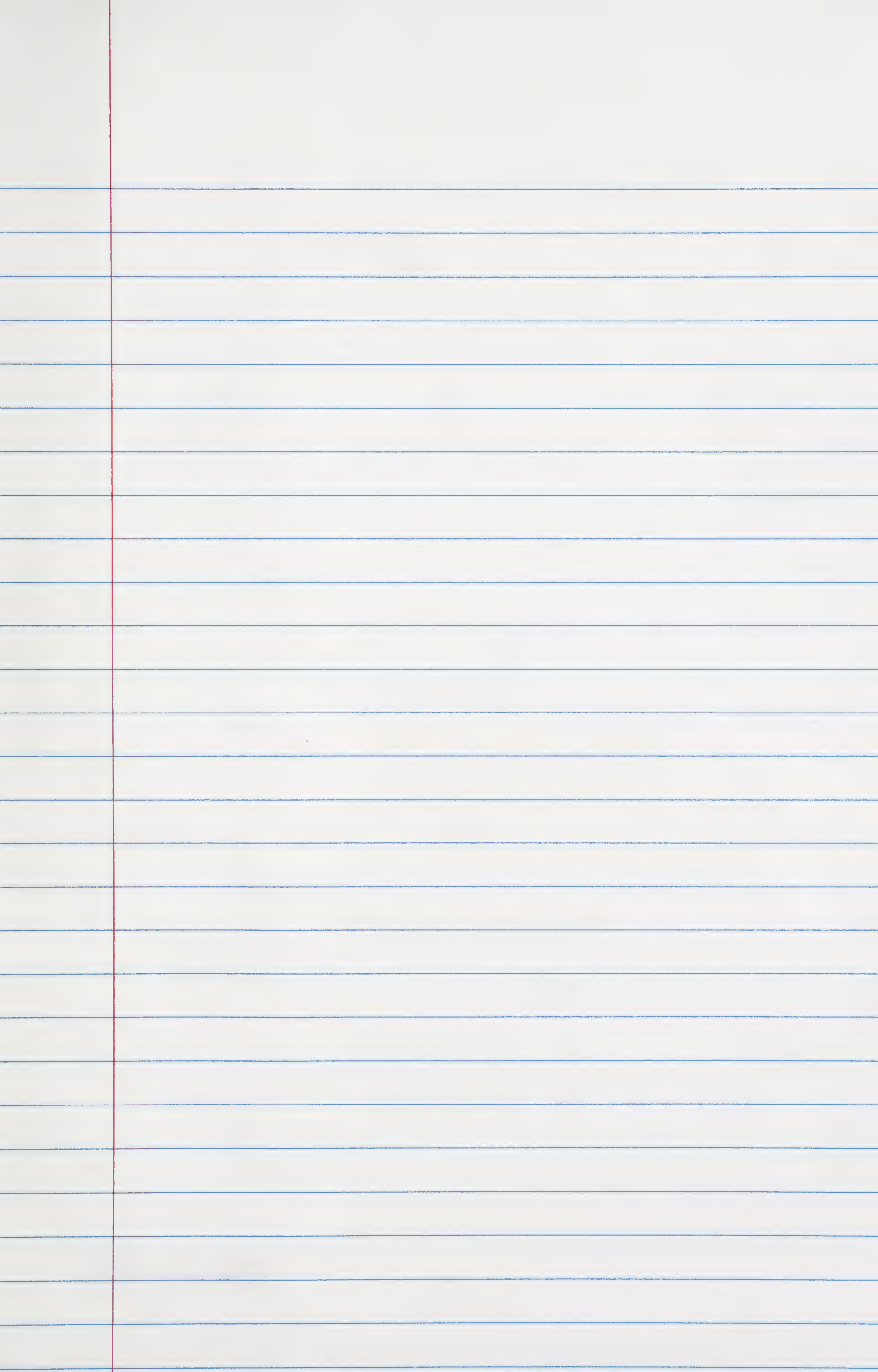
10:00 - No peregrine on Campanile.

14:30 - "

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